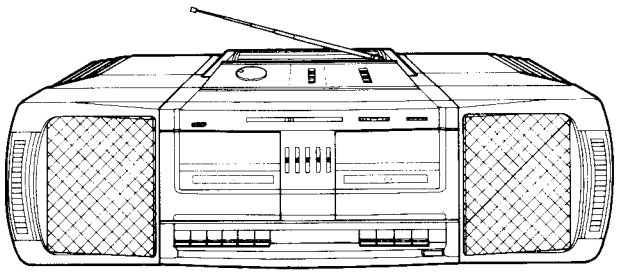
JVC

SERVICE MANUAL

PORTABLE COMPONENT SYSTEM

PC-W150 B/E/G/GI



Area suffix

B ..... U.K.
E ..... Continental Europe
G ..... West Germany
GI ..... Italy

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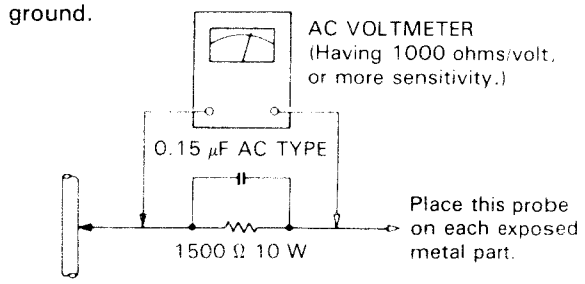
No. 1785
April 1990

1 Safety Precautions

1. The design of this product contains special hardware and may circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer or responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by (⚠) on the schematic diagram and Parts List in Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List in Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.
   When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).
     This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are mainteined.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

2 Safety Precautions about PC-W150

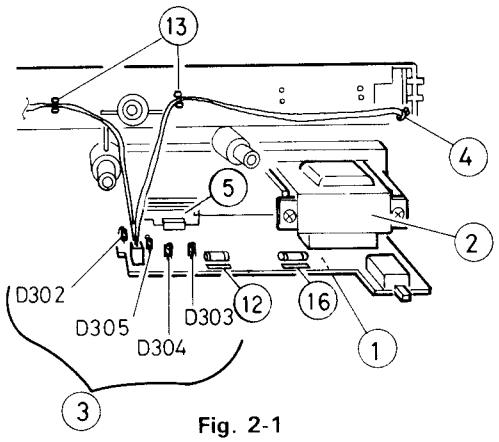


Fig. 2-1

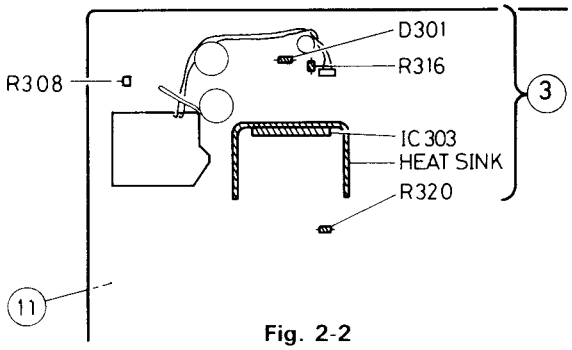


Fig. 2-2

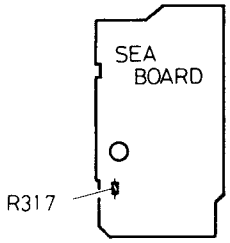


Fig. 2-4

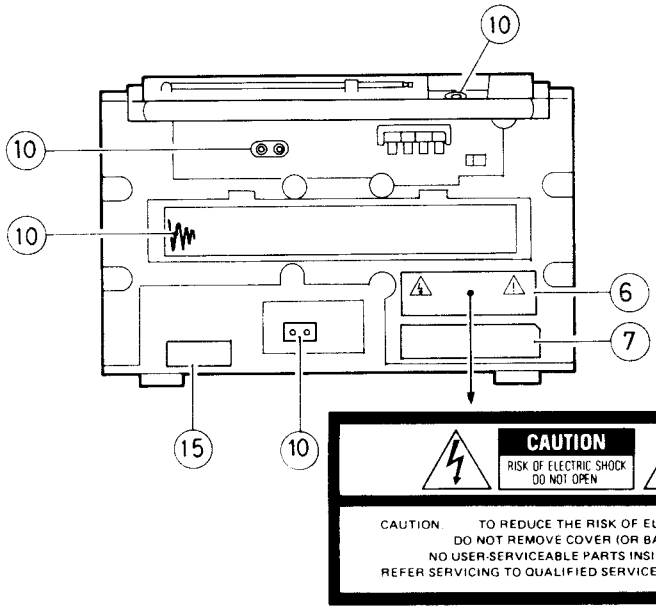
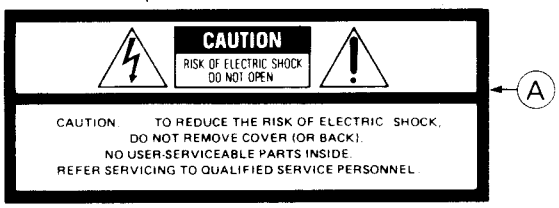


Fig. 2-3


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
A

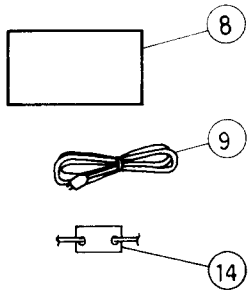


Fig. 2-5

■ Safety Check Point

1. Solder not to be out of pattern around primary circuit and beside the primary.
2. Make sure the approval number "VTP48P2-12H" or "VTP48P2-12HN" pattern must not tear off and should be mounted firmly with the cabinet by screws.
3. Keep away wires and capacitors from heat parts of IC303, D301~D305, R316, R308, R320 and R317.
4. Keep away from heat parts to prevent touch when opening wires to be tied certainly.
5. Make sure the type of AC socket (HSC1466).
6. Caution (A) to be indicated on rear cabinet.
7. Make sure the name plate and version name.
8. Model name on instruction book to be checked.
9. Make sure the power cord from attachment plug side, connector plug side.

Version	Attachment Plug	Connector Plug	Cord
PC-W150 E/G/GI	" Ⓢ "	"KS-15" or "SE-2"	"◁VDE▷"
PC-W150B	—	" ♆ " and "KS-15F"	BASEC BS6500

10. High pot test between AC socket, headphone jack and CD IN jack to done in production, and between AC socket, CD IN, headphone jack and battery to be done in out going quarty control.
    Take soldering componet parts to be put bond.
11. Indication of rating on fuse to be " Ⓢ " "T1.6A" and hold the fuse not to be loose (E version only) and indication of rating to be prining near side.
12. Keep away socket from wire and wire to be put bond.
13. Warning label to be attached on power cord (B version only).
14. Put BE label on rear cabinet (B version only).
15. Indication of ratting on fuse to be " Ⓢ " "T1.6A" and hold the fuse not to be loose (Indication of " ♆ " to be and indication checked by bag unit B version only of rating to be prining near side.
16. Make sure the circuit board UL marking indication (B version only).

Ⓢ ..... Semko

♆ ..... British standard institute

3 Features

- Synchro Start high-speed dubbing.
- 5-Element S.E.A. Graphic equalizer.
- ALC (Automatic Recording Level Control) with variable monitor.
- Metal tape compatible.
- Power output: 2 watts per channel min RMS at 3 ohms from 150 Hz to 15 kHz with no more than 10% total harmonic distortion.

4 Specifications

<Radio Section>

Frequency ranges	: FM	88— 108 MHz
	SW	6— 18 MHz
	MW	540—1600 kHz
	LW	150—350 kHz (PC-W150 B/E)
	LW	150—280 kHz (PC-W150 G)
Antennas	: Telescopic antenna for FM & SW Ferrite core antenna for MW & LW	

<Tape Recorder Section>

Track system	: 4-track 2-channel stereo
Frequency response	: 80—12,500 Hz (with normal tape)
Wow & flutter	: 0.15% (WRMS)
Fast wind time	: Approx. 145 sec. (C-60 cassette)

<General>

Power output	: 16 W (8 W + 8 W) at 3 Ω (Max.) 10 W (5 W + 5 W) at 3 Ω (10% THD)
S.E.A. characteristics	: S.E.A. center frequencies: 100 Hz/330 Hz/1 kHz/3.3 kHz/ 10 kHz S.E.A. control range ±10 dB
Input jack	: MIC × 1 (1 mV/—60 dBV) 200 Ω—2 kΩ CD IN × 2 (440 mV/47 kΩ)
Output jacks	: Speaker × 2 (3—8 Ω) Headphones × 1 Ω (17 mW/32 Ω, 8 Ω—1 kΩ)
DIN socket (PC-W150 G)	: Min. input level: 0.6 mV/kΩ Input impedance: 10 kΩ Output level: 500 mV Output impedance: 4.7 kΩ
Power supply	: DC 12 V (8"R20" batteries) AC 220—240 V, 50/60 Hz Ext. DC IN 12 V (Car battery via optional CN-332 car adapter) (PC-W150E only)
Power Consumption	: 20 W (with power switch ON) 1.6 W (with power switch standby)
Dimensions	: 673(W) × 217(H) × 220(D)mm including knob
Weight	: Approx. 5.4 kg (without batteries)

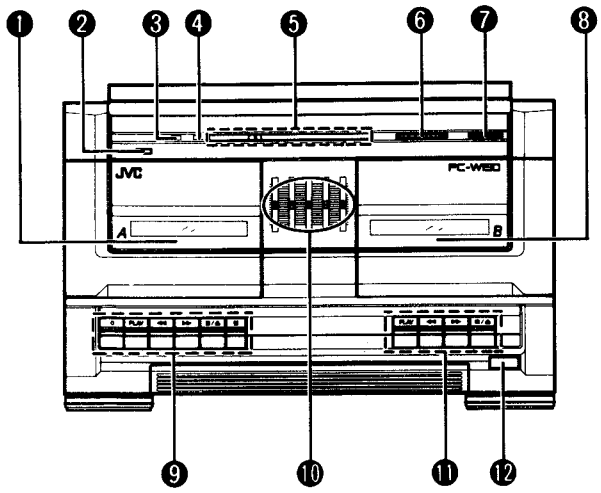
<Speaker Section> (each unit)

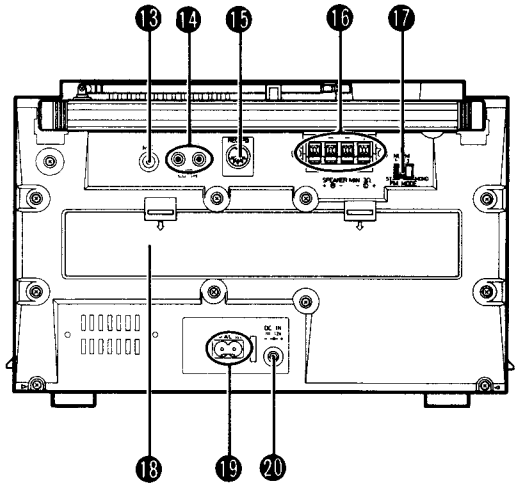
Speaker	: 10 cm × 1
Impedance	: 3 Ω
Dimensions	: 171(W) × 197(H) × 210(D) mm
Weight	: Approx. 1.1 kg

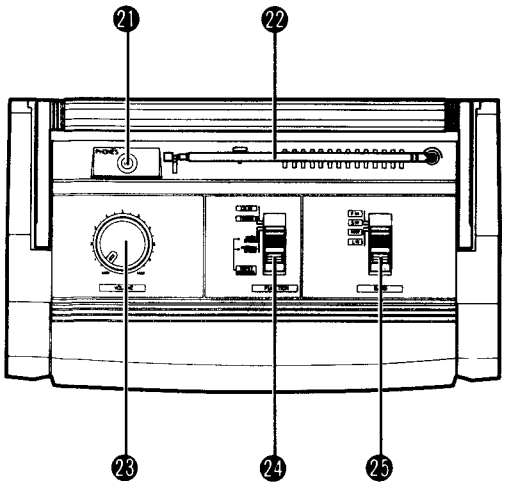
Design and specifications subject to change without notice.

5 Instruction Book (Extract: B/E/G version only)

LOCATION OF CONTROLS







1. Cassette holder (Deck A)
2. TAPE (PLAY) switch
3. FM STEREO indicator
4. POWER indicator
5. Dial scale
6. TUNING knob
7. FINE TUNING knob
8. Cassette holder (Deck B)
9. Cassette operation buttons (Deck A)
   - O REC button
   - ▶ PLAY button
   - ◀◀ REW button
   - ▶▶ FF button
   - ■/⏏ STOP/EJECT button
   - ▮▮ PAUSE button
10. 5-BAND GRAPHIC EQUALIZER controls
11. Cassette operation buttons (Deck B)
    - ▶ PLAY button
    - ◀◀ REW button
    - ▶▶ FF button
    - ■/⏏ STOP/EJECT button
12. POWER switch
13. MIC jack (3.5 mm dia. mini)
14. CD IN jacks
15. DIN jack (REC/PB) (PC-W150G only)
16. SPEAKER terminals
17. FM MODE/BEAT CUT switch
18. Battery compartment cover
19. AC IN jack
20. DC IN 12 V jack (− ⊖ +) (PC-W150E only)
21. PHONES jack (3.5 mm dia. stereo mini)
22. Telescopic antenna for FM and SW reception
23. VOLUME control
24. FUNCTION switch
25. BAND switch (FM/SW/MW/LW)

2 TAPE (PLAY) switch
Set this switch according to the type of tape to be used.
- METAL/CrO_2: (playback only)
  Set to this position to listen to a metal (type IV) or chrome (type II) tape.
- NORMAL:
  Set to this position to listen to a normal (type I) tape.

3 POWER indicator
Lights when Power switch is ON.

17 FM MODE/BEAT CUT switch
FM MODE — Stereo (ST):
Set to this position when listening to or recording an FM stereo broadcast.
FM MODE — MONO:
Set to this position when FM stereo reception is obscured by noise.
BEAT CUT:
Usually set to "NORM 1" position.
Beats which may occur while recording an AM or SW broadcast can be eliminated by changing the position of this switch.

24 FUNCTION switch
- CD IN (CD IN/DIN: PC-W150 G only)
  Set to this position when listening to or recording from the source connected to the CD IN (or DIN) jacks.
- TUNER —Set to this position when listening to or recording from the radio.
- TAPE-HIGH SPEED DUBBING
  Set to this position when dubbing at high-speed.
- TAPE-NORMAL SPEED DUBBING
  Set to this position when listening to a cassette or recording using the external microphone; also set to this position when dubbing at normal speed.

6 Location of Main Parts

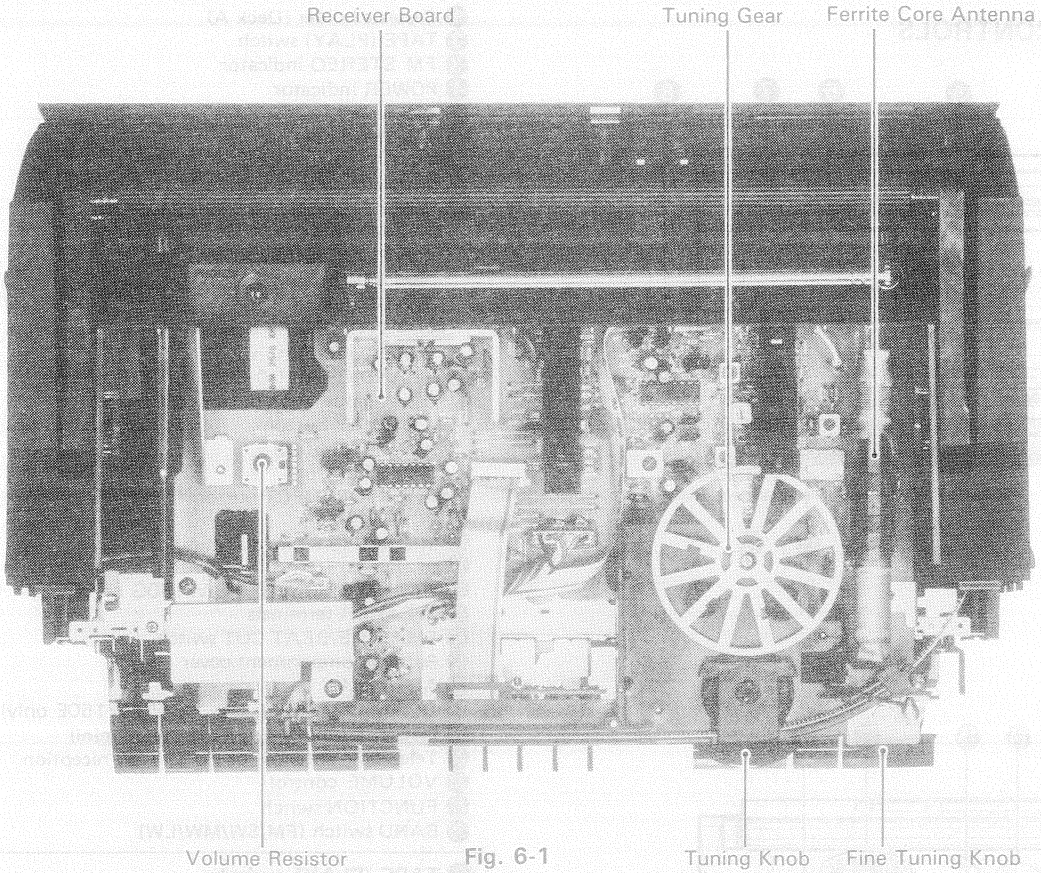


Fig. 6-1

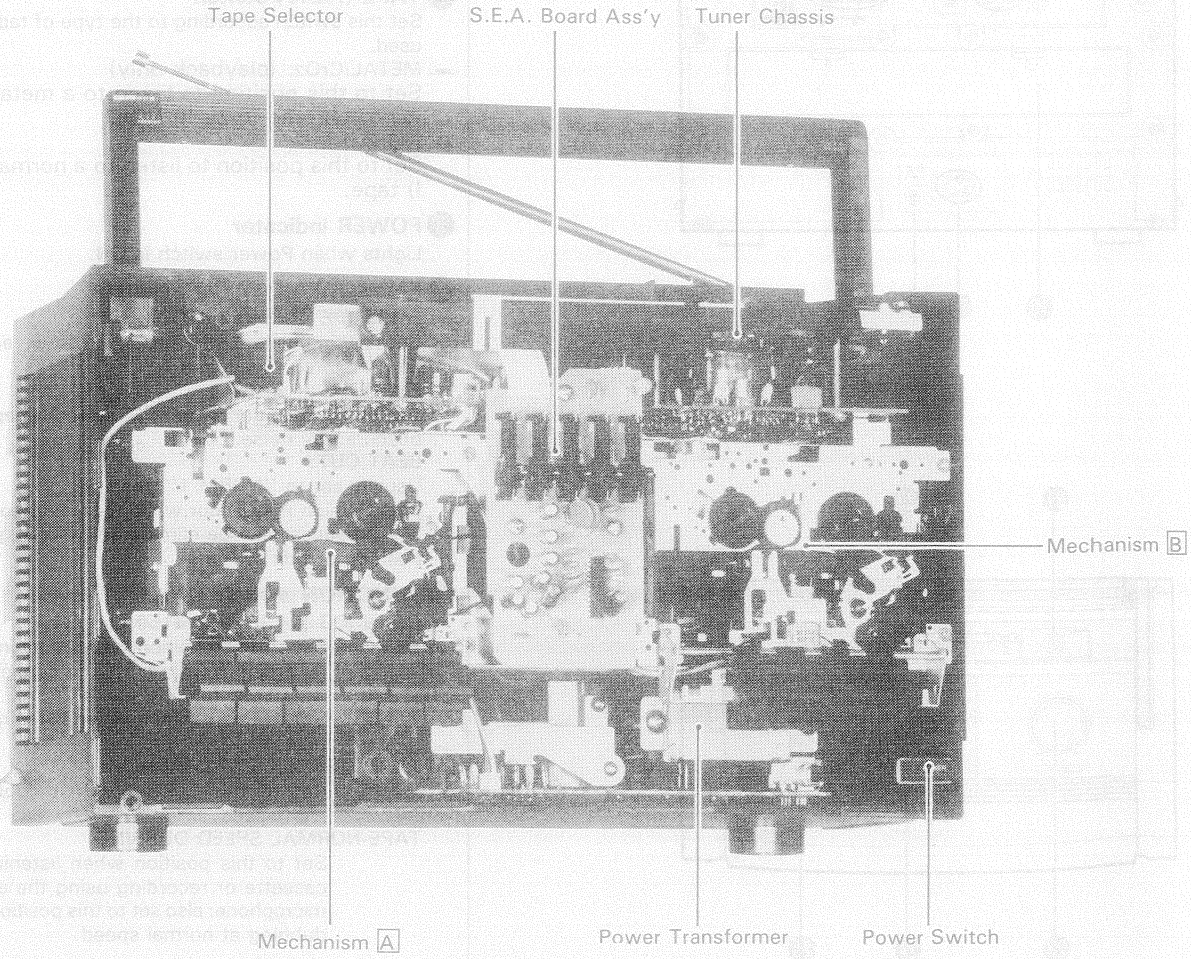


Fig. 6-2

7 Removal of Main Parts

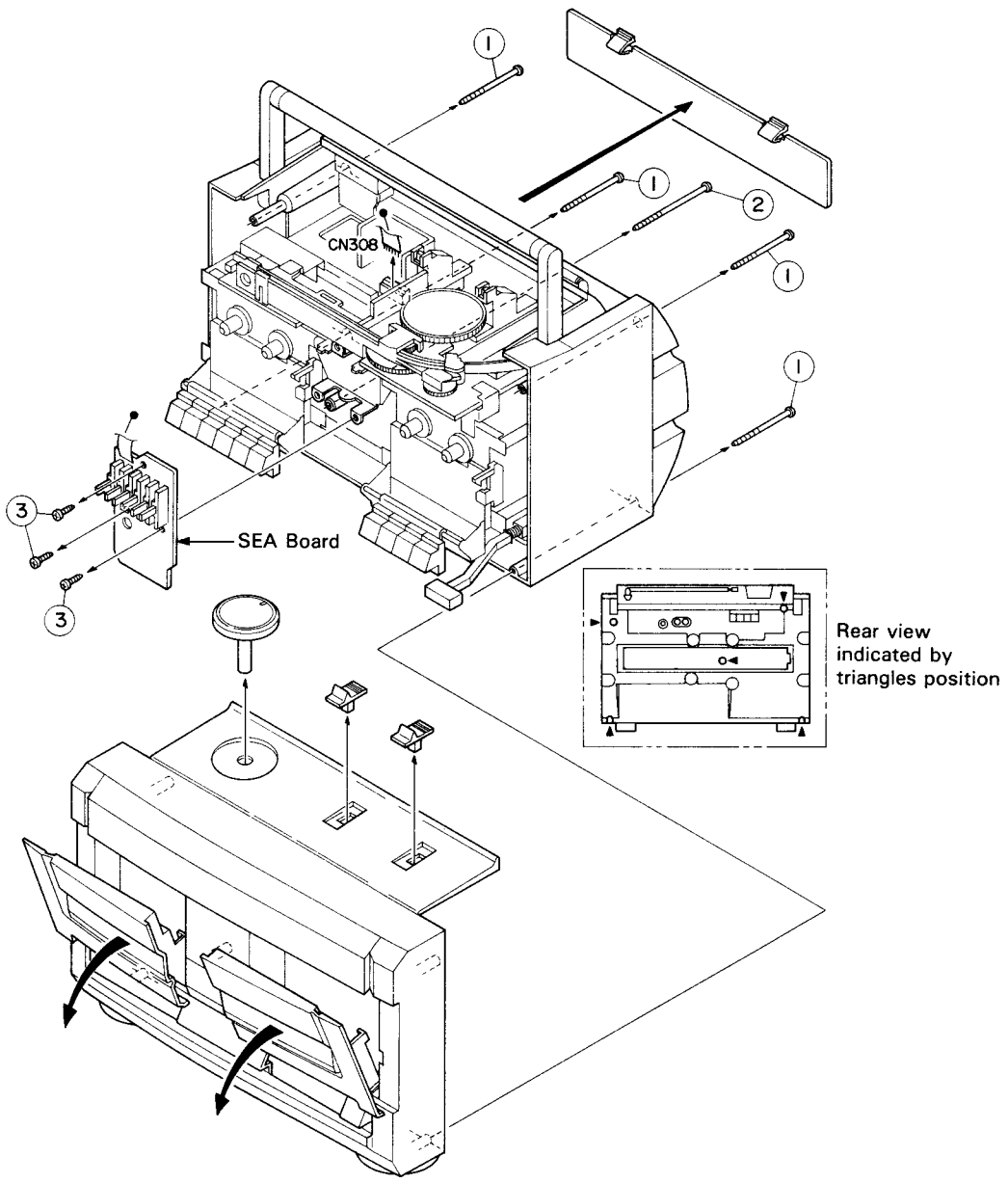


Fig. 7-1

■ **Front Cabinet**

(1) Take off the battery cover from the rear cabinet.
(2) Take off the volume knob, the function knob and the band knob.
(3) Remove five screws ①, ② indicated by triangles on the rear cabinet.
(4) Open the cassette door and separate the front cabinet from the rear cabinet.

■ **SEA Board**

(1) Take off the 6 PIN paralle wire from CN308 connector.
(2) Remove three screws ③ retaining the SEA board.

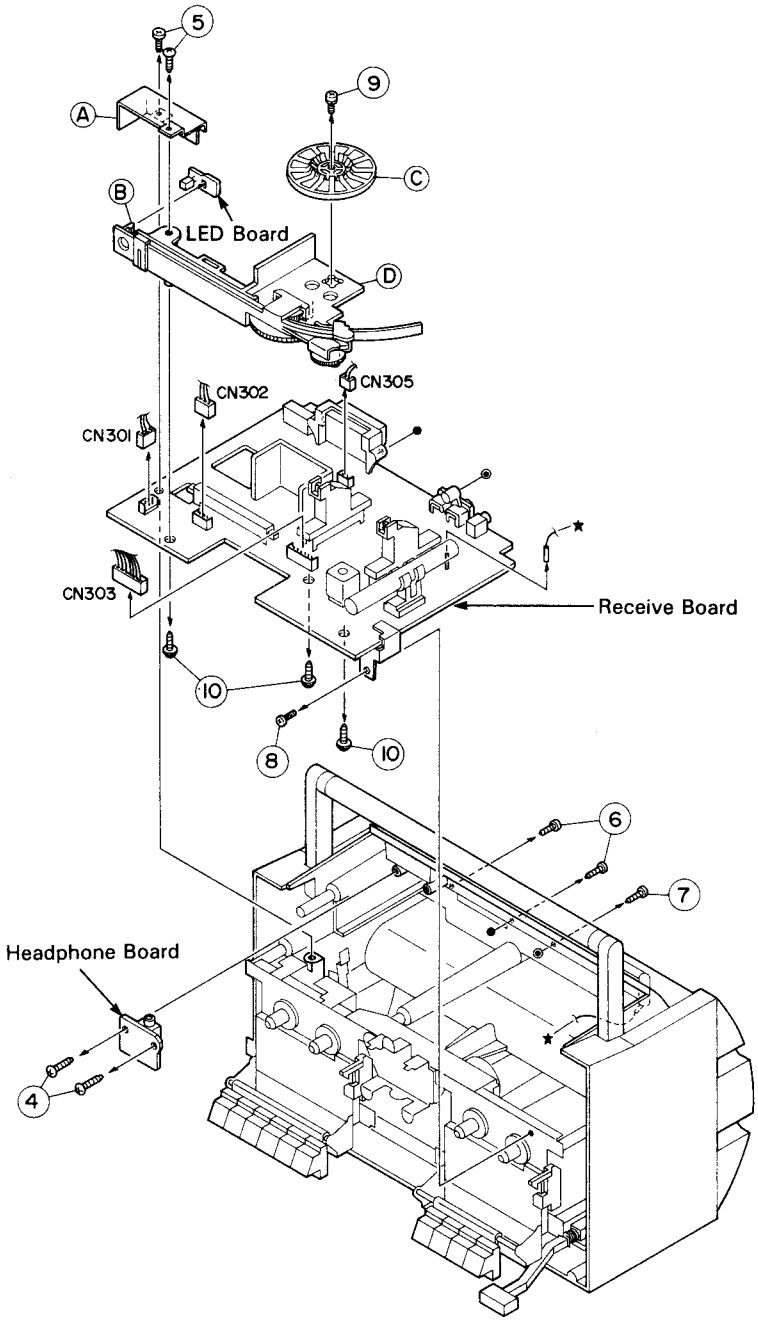


Fig. 7-2

■ **Headphone Board**

Remove two screws (4) from rear cabinet.

■ **Receiver Board**

(1) Remove two screws (5) retaining the shield plate (A).
(2) Take off four connectors (3 PIN: CN301 and CN302, 7 PIN: CN303, 2 PIN: CN305) from the receiver board.
(3) Take off the antenna wire from indicated TP1 on the receiver board.
(4) Remove three screws (6) (7) retaining the speaker terminal and PIN Jack from the rear cabinet.
(5) Remove the screw (8) retaining the receiver board sport bracket from Mechanism B.
(6) Remove the receiver board.

■ **Tuner Chassis (D)**

(1) Release the joining section (B) retaining the LED board from the tuner chassis (D).
(2) Take off the LED board.
(3) Remove the screw (9) retaining the tuner gear (C) from the receiver board.
(4) Take off the tuner gear (C).
(5) Remove three screws (10) retaining the tuner chassis (D).

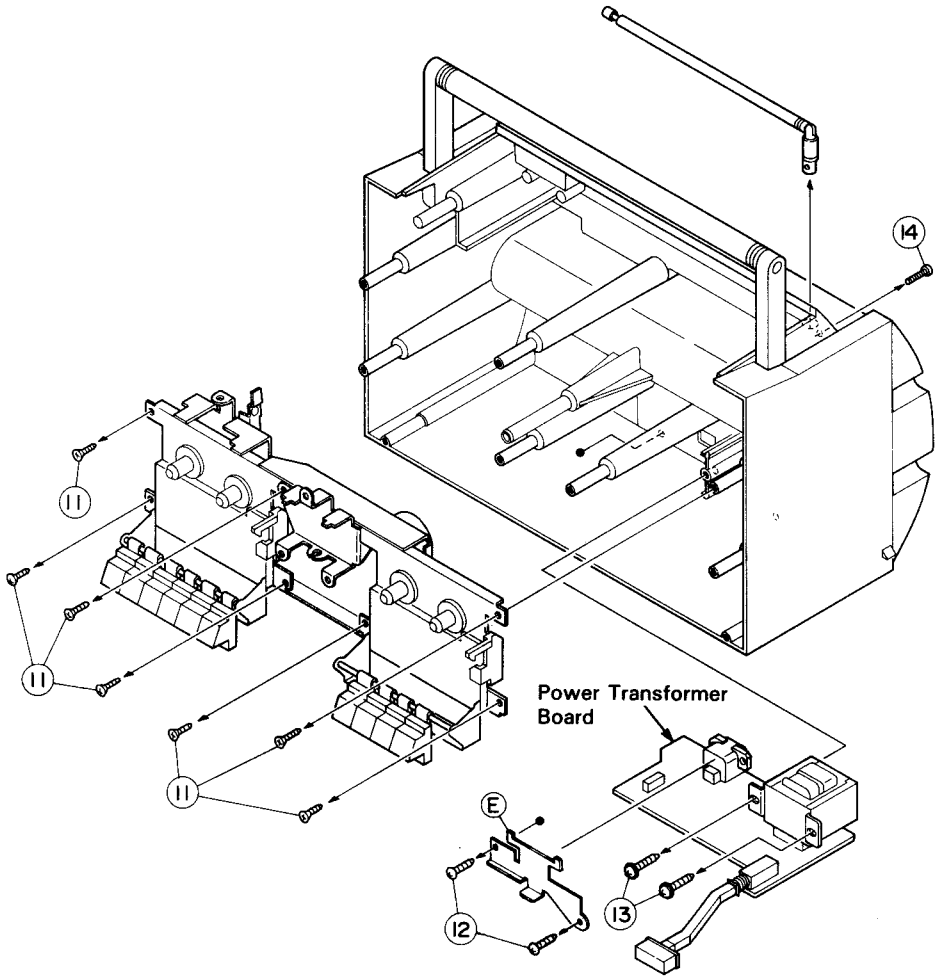


Fig. 7-3

■ **Mechanism Assembly**

(1) Remove seven screws (11) retaining the mechanism assembly from the rear cabinet.
(2) Take out the mechanism assembly.

■ **Power Transformer Board**

(1) Remove two screws (12) retaining the bracket (E) from the rear cabinet.
(2) Take off the bracket (E).
(3) Remove two screws (13) retaining the power transformer from the rear cabinet.
(4) Take out the power transformer.

■ **Rod Antenna**

(1) Remove the screw (14) retaining the rod antenna from the rear cabinet.
(2) Take out the rod antenna.

■ Mechanism Section

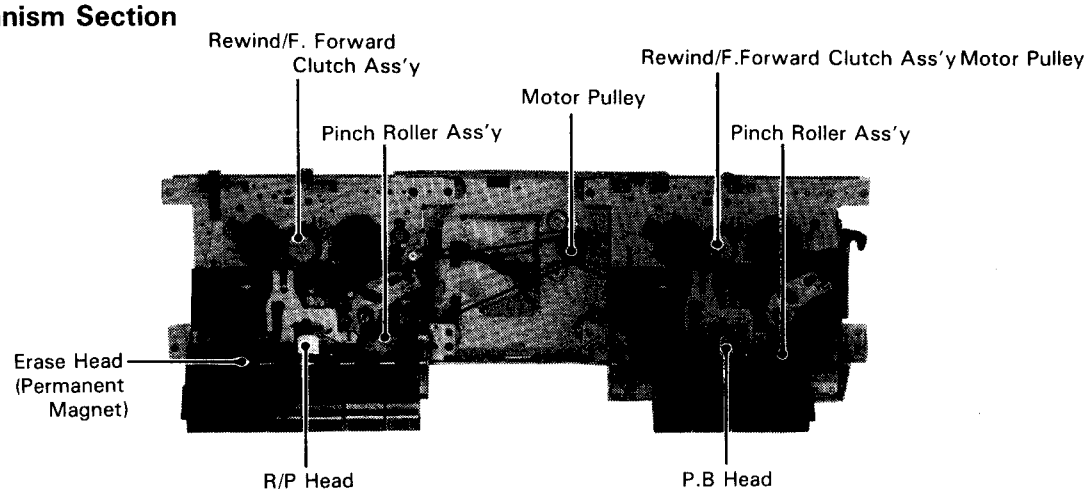


Fig. 7-4: Front Section

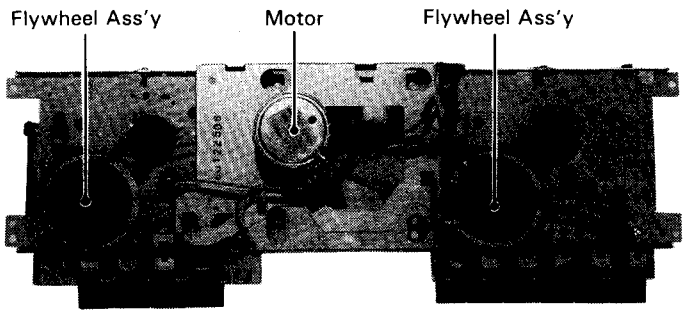


Fig. 7-5: Rear Section

■ Motor bracket (Recording/playback deck)

1) Remove the three screws (1).
2) Remove the chassis and Motor bracket from the bottom side.
   Then remove the bracket arm (panel).
   (The synchro arm can be removed from the pause lock. Return the pause lock after it is removed from the proper position.)

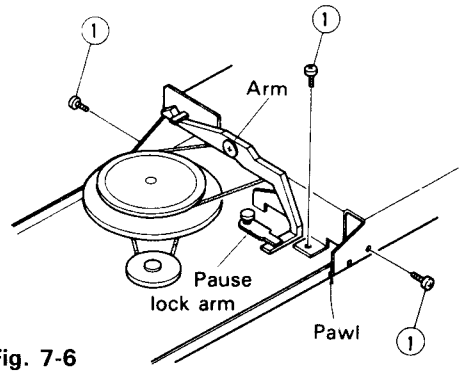


Fig. 7-6

■ Head section

Remove the record/playback head's mounting screw (2) and loosen screw (3).

■ Pinch roller

1) Remove the pinch roller arm stopper (6).

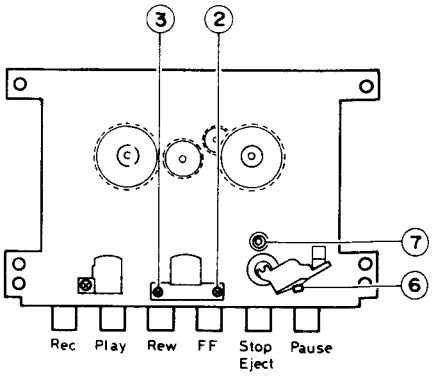


Fig. 7-7

■ Flywheel ass'y

1) Remove the poly washer (7) securing the capstan shaft.
2) Pull out the flywheel ass'y.

■ Mechanism Section

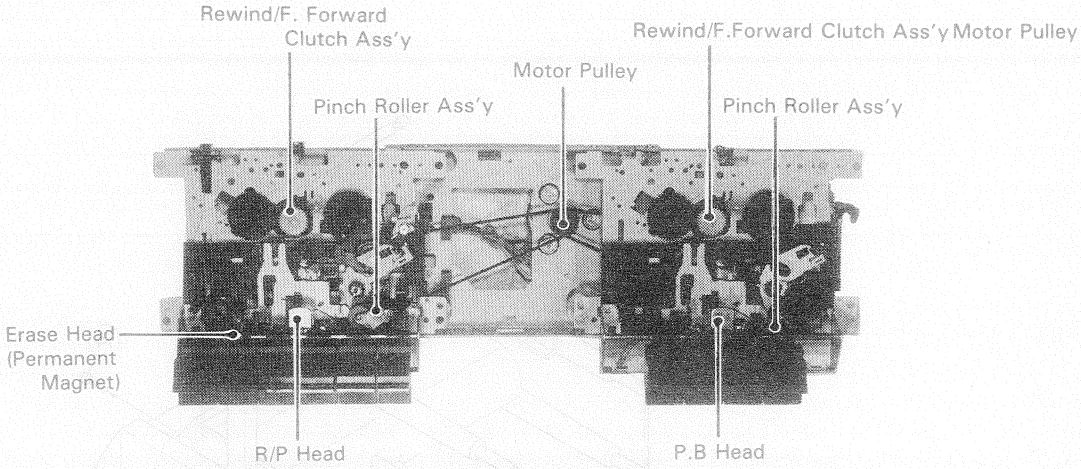


Fig. 7-4: Front Section

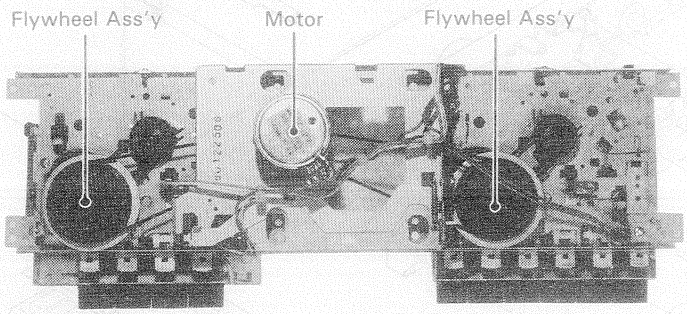


Fig. 7-5: Rear Section

■ Motor bracket (Recording/playback deck)

1) Remove the three screws (1).
2) Remove the chassis and Motor bracket from the bottom side.
   Then remove the bracket arm (panel).
   (The synchro arm can be removed from the pause lock. Return the pause lock after it is removed from the proper position.)

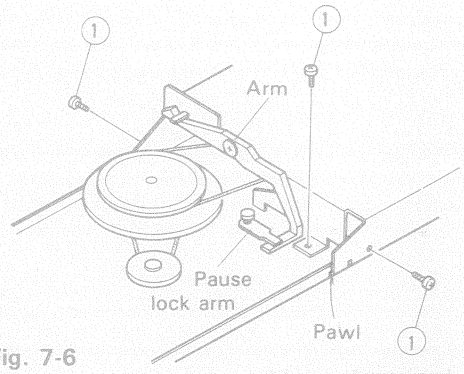


Fig. 7-6

■ Head section

Remove the record/playback head's mounting screw (2) and loosen screw (3).

■ Pinch roller

1) Remove the pinch roller arm stopper (6).

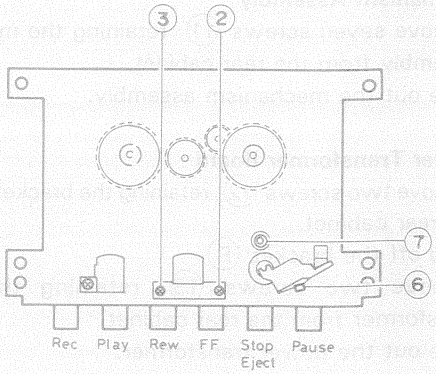


Fig. 7-7

■ Flywheel ass'y

1) Remove the poly washer (7) securing the capstan shaft.
2) Pull out the flywheel ass'y.

■ **Removal of the button ass'y from the mechanical chassis.**

- Leaf switch
  Press the switch's lock panel and raise from the left to remove.

- Gear (Below the flywheel)
  Remove the C washer (1) securing the gear.
  For reassembly, insert the Sensing Lever arm stand into the (4) section.

- Lock arm
  Press the arm stopper from window (3), and pull to remove.

- Chassis removal
  1) Remove the three spring (5), (6), and (7).
  2) Remove the two screws (2).
  3) Remove the two screws (8) securing the capstan metal.
  4) Gently remove the button ass'y from the chassis.

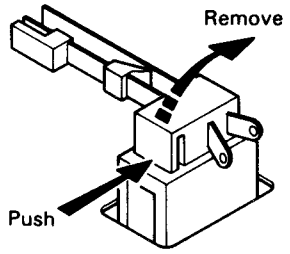


Fig. 7-8

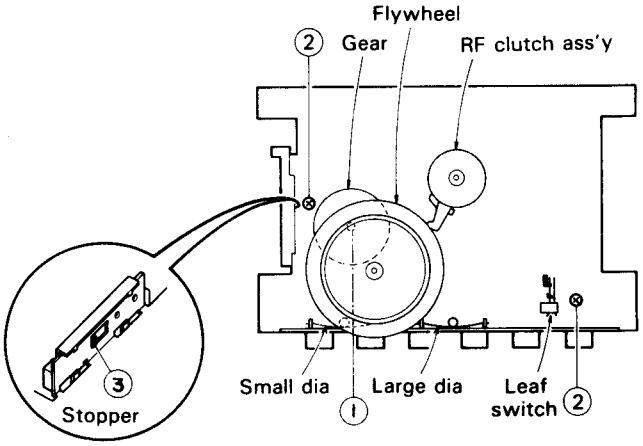


Fig. 7-9

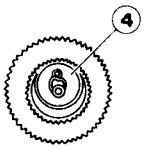


Fig. 7-10

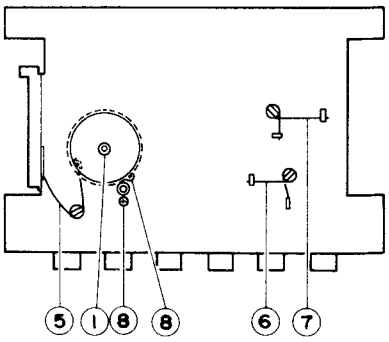


Fig. 7-11

8 Main Adjustments

■ Equipment and Measuring Instrument used for Adjustments

Electronic voltmeter
Audio frequency oscillator
Attenuator
Wow-flutter meter
Frequency counter
Standard signal generator
torque testing cassette gauge CTG-N
Alignment tape
Measuring tape : TS-8 (UR)
VTT702 (8 kHz)

■ Condition for Measurements

Power Supply ..... AC 110~120/220~240 V : (50/60 Hz)
DC 12 V
Reference output ... Speaker : 0 dBs (0.775 V)/3 Ω
Headphone : −10 dBs (0.245 V)/32 Ω
Reference Input ..... Ext. MIC : −58 dBs
DC IN : −5 dBs

Function position ....TAPE/FM MODE : TAPE NORMAL
FUNCTION : NORMAL SPEED
SEA : Center
3D : OFF
BEAT CUT : NORMAL

■ Condition for Measurement: Tuner Sections

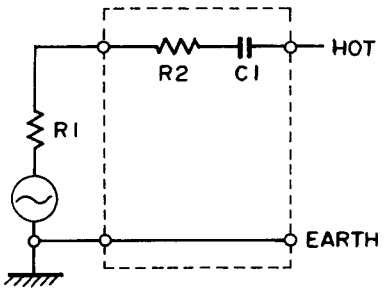
Supply voltage : DC 12 V or AC 110−120/220~240 V
Applied voltage of the Tuner : DC 6.5 V
Reference output : Speaker ; 50 mW (0.4 V)/3 Ω
Input signal : (AM) modulation frequency; 400 Hz, 30%
(FM) Modulation frequency;
400 Hz, 22.5 kHz dev.
Set position of Volume and Switch : SEA; Center

Attentive point

Connection of IF sweeper :
Connect a 30 pF capacitor and a 33 kΩ resistor in series to the sweeper's output while 0.082 μF capacitor and a 100 kΩ resistor in parallel to the input.
IF sweeper's output level :
Set as minimum as enough for adjustment.

FM MPX adjustment :
For this adjustment, connect a 100 kΩ resistor in series to a frequency counter's input.

Dummy antenna for short wave.



Lod length (cm)	L>90	90≦L≦60	L<60
C1 (PE)	10	8	6

R1+R2=80 Ω R1 : Output impedance of SSG.

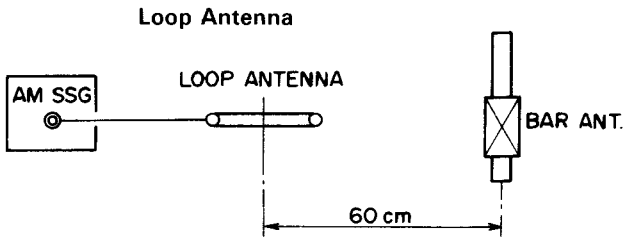


Fig. 8-1

■ Location of Adjustments

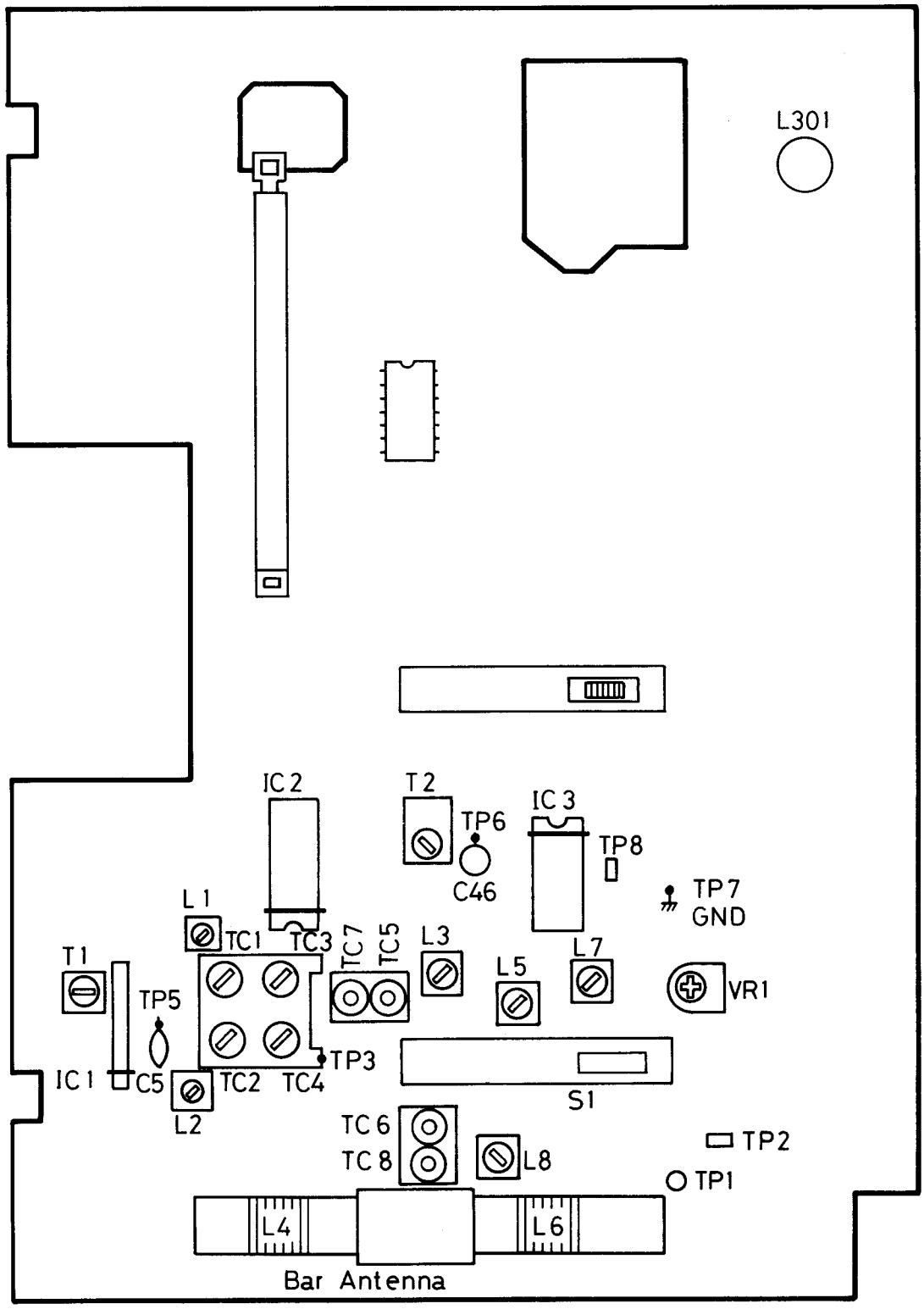
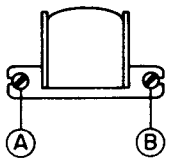


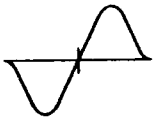
Fig. 8-2

■ Main Adjustment: Mechanism and Amplifier Sections

Item	Measuring Conditions and Main Adjustments	Standard Value	Adjusting Point
Head azimuth adjustment	<Conditions> 1. Mode : PLAY 2. Test tape : VTT702 (8 kHz) 3. Measuring point : Speaker terminal ..... 3 Ω <Adjustment> 1. Connect an electronic voltmeter to the speaker terminal. 2. Playback the test tape VTT702. 3. Adjust the head azimuth with screw Ⓐ (Fig. 8-3) until the reading of the electronic voltmeter becomes −2 dB from the peak. 4. Adjust to peak between FWD/REV within −4 dB from the peak.	−2 dB from the peak	 Fig. 8-3
Tape speed and wow-flutter adjustment	<Conditions> 1. Mode : PLAY, Normal speed 2. Test tape : VTT712 at tape end 3. measuring point : Speaker terminal <Confirmation> 1. Connect a wow-flutter meter to speaker terminal. 2. Playback the test tape VTT712 at tape end. 3. Adjust Semifixed resistor in the motor so that is obtained within 2950 ~ 3050 Hz at normal speed. 4. Check to see if reading of the meter is less than 0.35% (JIS RMS).	Normal Speed : 2950 ~ 3050 Hz High speed : 5100 ~ 5900 Hz Wow-flutter : less than 0.35% (JIS RMS)	Semifixed resistor in the motor
Playback frequency response confirmation	<Conditions> Test tape : VTT736 Mode : PLAY Measuring point : Speaker terminal <Confirmation> Playback the test tape VTT736 difference level against 1 kHz. 1 kHz/125 Hz : 1±3 dB 1 kHz/8 kHz : −1±3 dB	1 kHz/125 Hz : 1±3 dB 1 kHz/8 kHz : −1±3 dB	–
Recording and playback frequency response confirmation	<Conditions> 1. Test tape : UR(TS8) 2. Signal input : MIC 3. Recording level : Reference −20 dB Measuring point : Speaker terminal <Confirmation> 1. Refference signal −20 dB to be applied to MIC. 2. Difference level between 125 Hz and 8 kHz against 1 kHz to be checked. 1 kHz/125 Hz : −1±4 dB 1 kHz/8 kHz : 0 ±4 dB	1 kHz/125 Hz : −1±4 dB 1 kHz/8 kHz : 0±4 dB	–
Bias frequency adjustment	<Conditions> 1. Measuring point : Speaker terminal 2. Adjust L301 so that becomes is obtain standard value.		L301

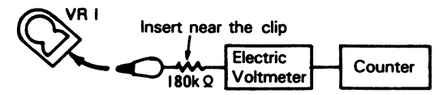
Beat Cut Switch	Bias frequency
1 (Normal)	72 kHz±3 kHz
2	70 kHz±3 kHz
3	68 kHz±3 kHz

■ Main Adjustment: Tuner Sections

Item	Measuring Conditions and Main Adjustments	Standard Value	Adjusting Point
FM IF adjustment	<Conditions> 1. Radio band : FM 2. Variable position : Near the minimum capacity position where no signal comes in. 3. Volume : minimum 4. Signal input : positive side to TP5 5. Measuring point : Positive side to TP6 Negative side to TP7 <Adjustment> 1. Adjust T1 so that "S" ourve on the scope may obtained maximum and balanced wave form as shown (Fig. 8-4). 2. On the FM IF circuit, in case where IF filter and discriminator was used solid units, there is unnecessary for IF tuning and that IF character depend upon the ceramic filter unit. Ceramic filter unit has been color marked on the body, it was expressed their center frequency. Classification of ceramic filter. Blue : 10.67 ±0.03 MHz Red : 10.70 ±0.03 MHz Orange : 10.73 ±0.03 MHz	 Maximum wave **Fig. 8-4**	T1
MW tracking adjustment	<Conditions> 1. Radio band : AM 2. Signal input : Standard loop antenna 3. Input frequency : 520 kHz, 1650 kHz (PC-W150 B/E/G) 516 kHz, 1632 kHz (PC-W150 GI) 600 kHz, 1400 kHz <Adjustment> 1. Receive 520 kHz (or 516 kHz) at maximum variable capacitor position. 2. Adjust L5 so that output level becomes maximum. 3. Receive 1650 kHz (1632 kHz) at minimum variable capacitor position. 4. Adjust TC5 so that output level becomes maximum. 5. Repeat the above step 1, 2 through 3, 4. 6. Receive 600 kHz and adjust L6 so that output level becomes maximum. 7. Receive 1400 kHz and adjust TC6 so that output level becomes maximum. 8. Repeat the above step 6. through 7. so that output becomes maximum.	Input frequency : 520 kHz (or 516 kHz) maximum Input frequency : 1650 kHz (or 1632 kHz) maximum Input frequency : 600 kHz maximum Input frequency : 1400 kHz maximum	L5 TC5 L6 TC6
LW tracking adjustment	<Conditions> 1. Radio band : LW 2. Signal input : Standard loop antenna 3. Input frequency : 145 kHz, 360 kHz 138 kHz, 293 kHz (PC-W150 GI) 145 kHz, 360 kHz (PC-W150 B/E/G) 145 kHz, 290 kHz (PC-W150 G) <Adjustment> 1. Receive 145 kHz at maximum variable capacitor position. 2. Adjust L3 so that output level becomes maximum. 3. Receive 360 kHz at minimum variable capacitor position. 4. Adjust TC3 so that output level becomes maximum. 5. Repeat the above step 1, 2 through 3, 4. 6. Receive 145 kHz and adjsut L4 so that output level becomes maximum.	Input frequency : 145 kHz maximum Input frequency : 360 kHz maximum Input frequency : 145 kHz maximum	L3 TC3 L4 TC4

Item	Measuring Conditions and Main Adjustments	Standard Value	Adjusting Point
	7. Receive 360 kHz and adjust TC4 so that output level becomes maximum. 8. Repeat the above step 6. through 7. so that output level becomes maximum.	Input frequency : 360 kHz maximum	TC4
SW tracking adjustment	<Conditions> 1. Radio band : SW 2. Signal input : Dummy antenna/TP1, TP2 3. Input frequency : 5.8 MHz, 18.6 MHz 6.0 MHz, 18.0 MHz <Adjustment> 1. Receive 5.8 MHz at maximum variable capacitor position. 2. Adjust L7 so that output level becomes maximum. 3. Receive 18.6 MHz at minimum variable capacitor position. 4. Adjust TC7 so that output level becomes maximum. 5. Adjust the above aligning position (L7 & TC7) repeatedly so that the tuner can be received above frequency range (band width). 6. Receive 6.0 MHz and adjust L8 so that output level becomes maximum. 7. Receive 18.0 MHz and adjust TC8 so that output level becomes maximum. 8. Adjust the above aligning position (L8 & TC8) repeatedly so that the tuner can be obtained the best sensitivity.	Input frequency : 5.8 MHz Input frequency : 18.6 MHz Input frequency : 6.0 MHz Input frequency : 18.0 MHz	L7 TC7 L8 TC8
FM tracking adjustment (PC-W150 B/E)	<Conditions> 1. Radio band : FM 2. Signal input : 75 Ω unbalance Positive side to TP1 Negative side to TP2 3. Input frequency : 87.5 MHz, 109 MHz 90 MHz, 106 MHz <Adjustment> 1. Receive 87.5 MHz at maximum variable capacitor position. 2. Adjust L1 so that output level becomes maximum. 3. Receive 109 MHz at minimum variable capacitor position. 4. Adjust TC1 so that output level becomes maximum. 5. Adjust the above aligning position (L1 & TC1) repeatedly so that the tuner can be received above frequency range (band width). 6. Receive 90 MHz and adjust L2 so that output level becomes maximum. 7. Receive 106 MHz and adjust TC2 so that output level becomes maximum. 8. Adjust the above aligning position (L2 & TC2) repeatedly so that the tuner can be obtained the best sensitivity.	Input frequency : 87.5 MHz maximum Input frequency : 109 MHz maximum Input frequency : 90 MHz maximum Input frequency : 106 MHz maximum	L1 TC1 L2 TC2

Item	Measuring Conditions and Main Adjustments	Standard Value	Adjusting Point
FM tracking adjustment (PC-W150 G)	<Conditions> 1. Radio band : FM 2. Signal input : 75 Ω unbalance 3. Input frequency : Positive side to TP1 Negative side to TP2 87.5±0.1 MHz, 108.3±0.05 MHz 90 MHz, 106 MHz <Adjustment> 1. Receive 87.5±0.1 MHz at maximum variable capacitor position. 2. Adjust L1 so that output level becomes maximum. 3. Receive 108.3±0.05 MHz at minimum variable capacitor position. 4. Adjust TC1 so that output level becomes maximum. 5. Adjust the above aligning position (L1 & TC1) repeatedly so that the tuner can be received above frequency range (band width). 6. Receive 90 MHz and adjust L2 so that output level becomes maximum. 7. Receive 106 MHz and adjust TC2 so that output level becomes maximum. 8. Adjust the above aligning position (L2 & TC2) repeatedly so that the tuner can be obtained the best sensitivity.	Input frequency : 87.5±0.1 MHz maximum Input frequency : 108.3±0.05 MHz maximum Input frequency : 90 MHz maximum Input frequency : 106 MHz maximum	L1 TC1 L2 TC2
FM tracking adjustment (PC-W150 GI)	<Conditions> 1. Radio band : FM 2. Signal input : 75 Ω unbalance 3. Input frequency : 87.35±0.05 MHz, 108.3±0.05 MHz 90 MHz, 106 MHz <Adjustment> 1. Receive 87.35±0.05 MHz at maximum variable capacitor position. 2. Adjust L1 so that output level becomes maximum. 3. Receive 108.3±0.05 MHz at minimum variable capacitor position. 4. Adjust TC1 so that output level becomes maximum. 5. Adjust the above aligning position (L1 & TC1) repeatedly so that the tuner can be received above frequency range (band width). 6. Receive 90 MHz and adjust L2 so that output level becomes maximum. 7. Receive 106 MHz and adjust TC2 so that output level becomes maximum. 8. Adjust the above aligning position (L2 & TC2) repeatedly so that the tuner can be obtained the best sensitivity.	Input frequency : 87.35±0.05 MHz maximum Input frequency : 108.3±0.05 MHz maximum Input frequency : 90 MHz maximum Input frequency : 106 MHz maximum	L1 TC1 L2 TC2

Item	Measuring Conditions and Main Adjustments	Standard Value	Adjusting Point
FM MPX adjustment	<Conditions> 1. Radio band : FM 2. Input frequency : 98 MHz (unmodulated 60 dB signal) 3. Signal input : TP1, TP2 4. Measuring point : TP7, TP8 <Adjustment> 1. Connect the digital frequency counter to TP8 (positive side) and TP7 (negative side). 2. Adjust VR1 so that above frequency is 19 kHz ±100 Hz.  Signal should be amplified by an electronic voltmeter so that sounter could measure its frequency. Fig. 8-5	19 kHz ±100 Hz	VR1

9 Block Diagram

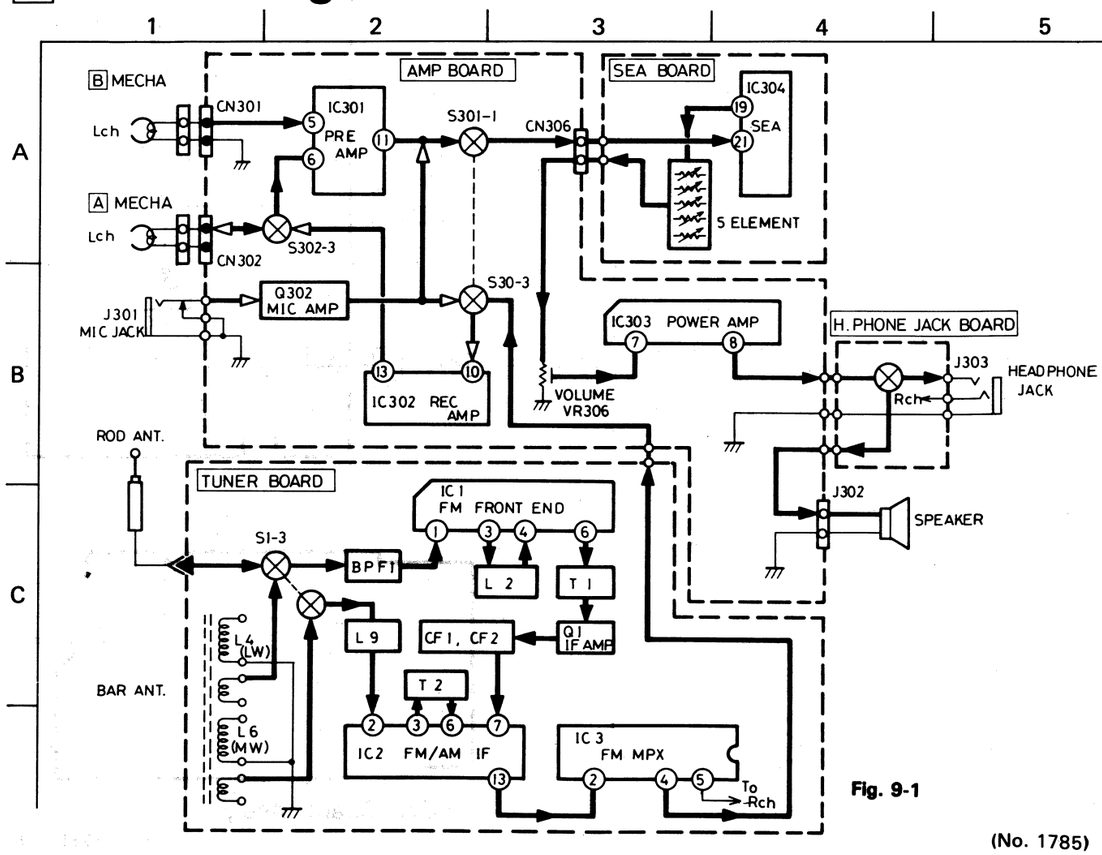
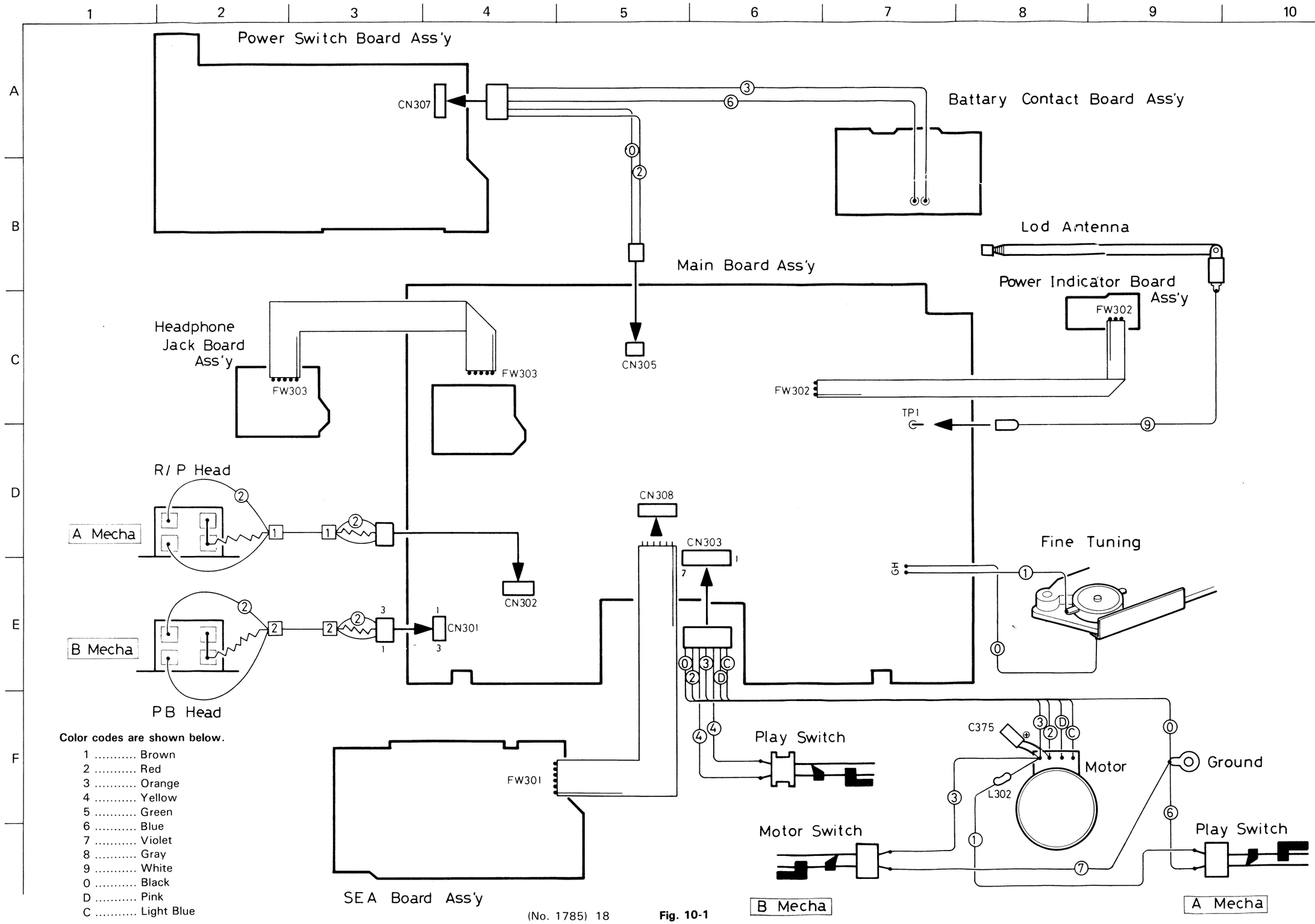


Fig. 9-1

10 Wiring Connections



Color codes are shown below.

1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White
0	Black
D	Pink
C	Light Blue

Fig. 10-1

11 Standard Schematic Diagram (Tuner Sections: E/B version)

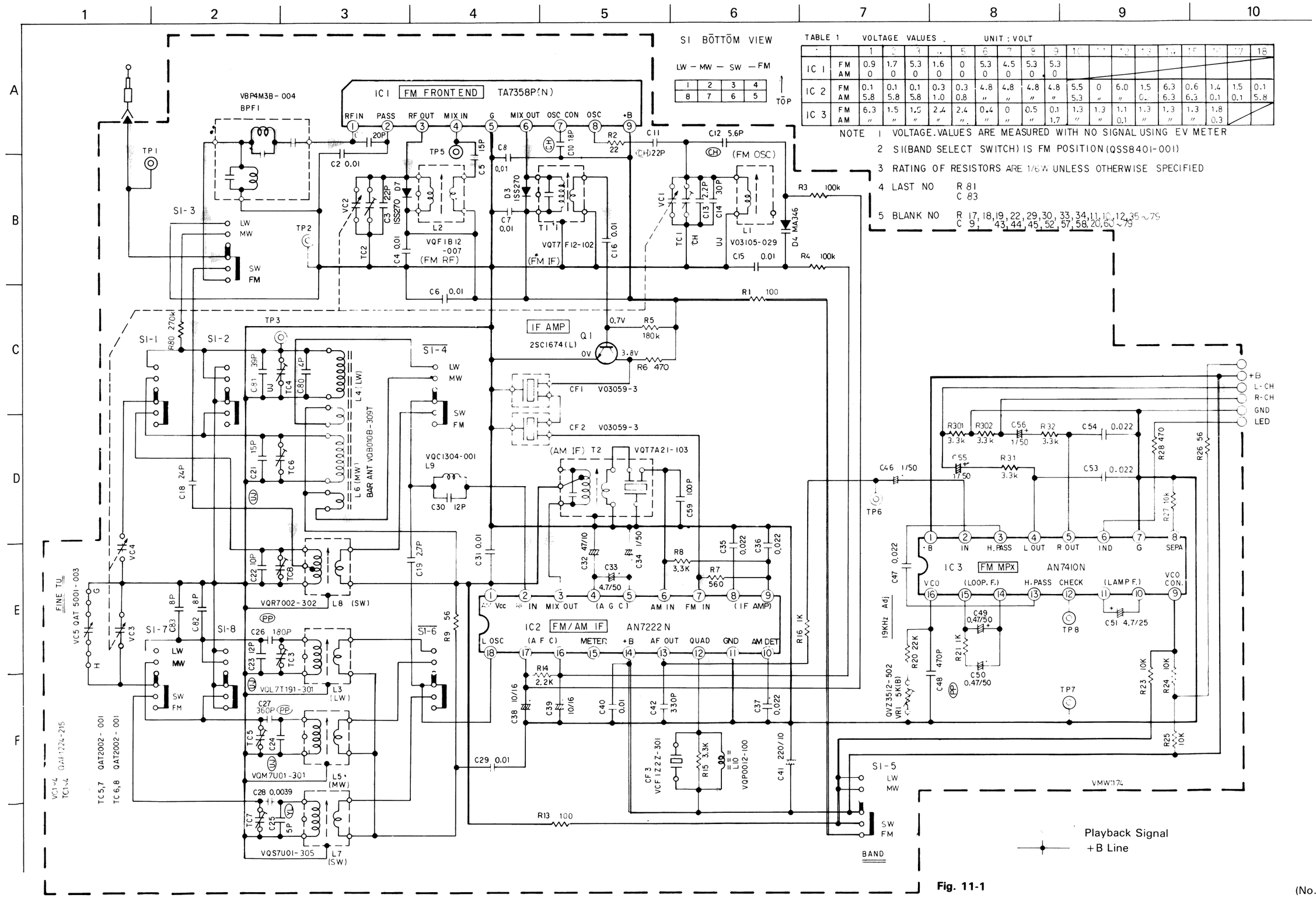


TABLE 1 VOLTAGE VALUES UNIT : VOLT

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
IC 1	FM	0.9	1.7	5.3	1.6	0	5.3	4.5	5.3	5.3									
	AM	0	0	0	0	0	0	0	0	0									
IC 2	FM	0.1	0.1	0.1	0.3	0.3	4.8	4.8	4.8	4.8	5.5	0	6.0	1.5	6.3	0.6	1.4	1.5	0.1
	AM	5.8	5.8	5.8	1.0	0.8	〃	〃	〃	〃	5.3	〃	〃	0.2	6.3	6.3	0.1	0.1	5.8
IC 3	FM	6.3	1.5	1.5	2.4	2.4	0.4	0	0.5	0.1	1.3	1.3	1.1	1.3	1.3	1.3	1.8		
	AM	〃	〃	〃	〃	〃	〃	〃	〃	1.7	〃	〃	0.1	〃	〃	〃	0.3		

NOTE 1 VOLTAGE VALUES ARE MEASURED WITH NO SIGNAL USING EV METER
2 SI(BAND SELECT SWITCH) IS FM POSITION (QSS8401-001)
3 RATING OF RESISTORS ARE 1/6W UNLESS OTHERWISE SPECIFIED
4 LAST NO R 81
C 83
5 BLANK NO R 17, 18, 19, 22, 29, 30, 33, 34, 11, 10, 12, 35 ~ 79
C 9, 43, 44, 45, 52, 57, 58, 20, 60 ~ 79

Fig. 11-1

(Tuner Sections: G/GI version)

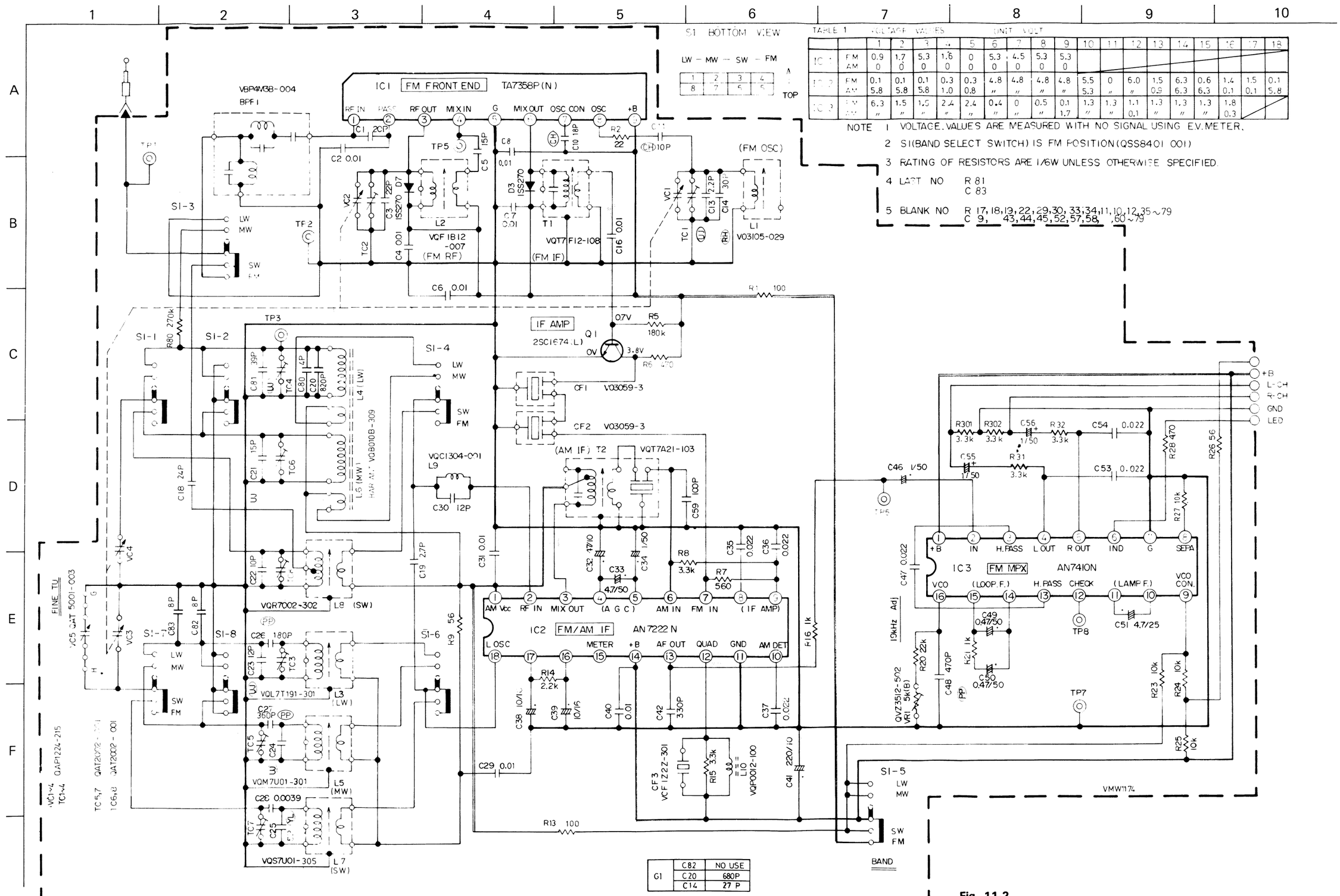


Fig. 11-2

(Amplifier Section) **Note:** DIN Circuit Section refer to Back Page

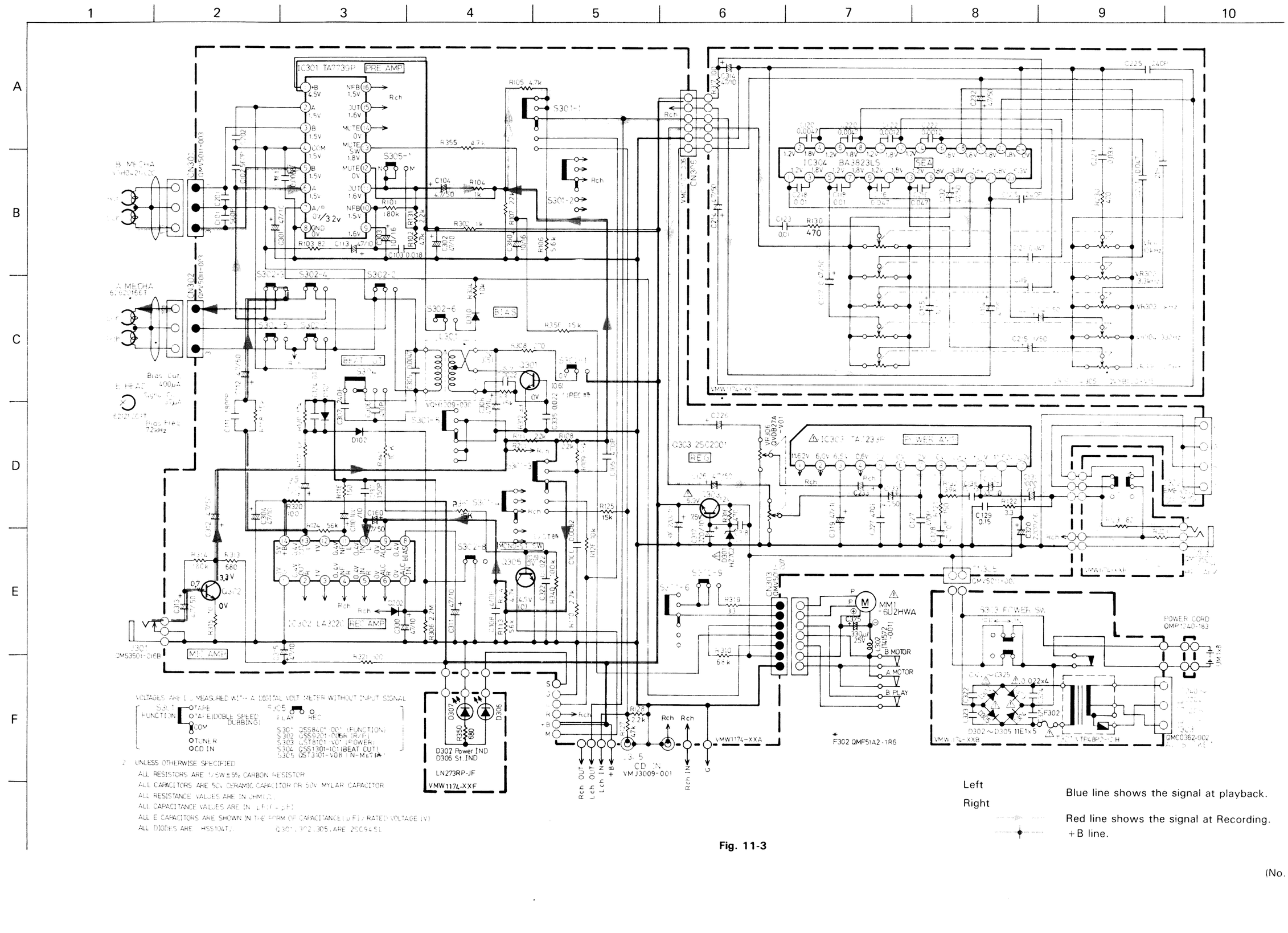


Fig. 11-3

(Amplifier Sections: B version)

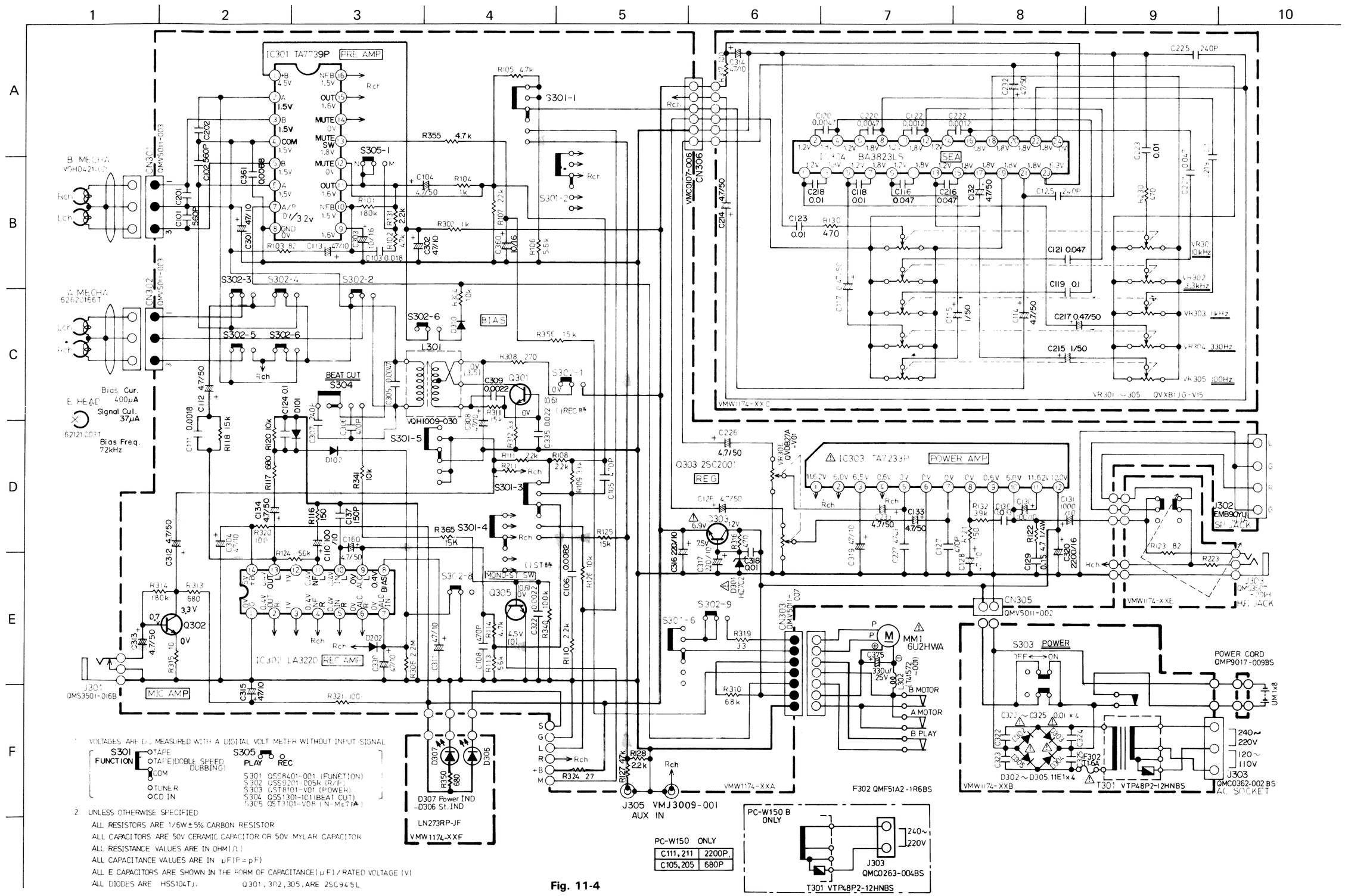
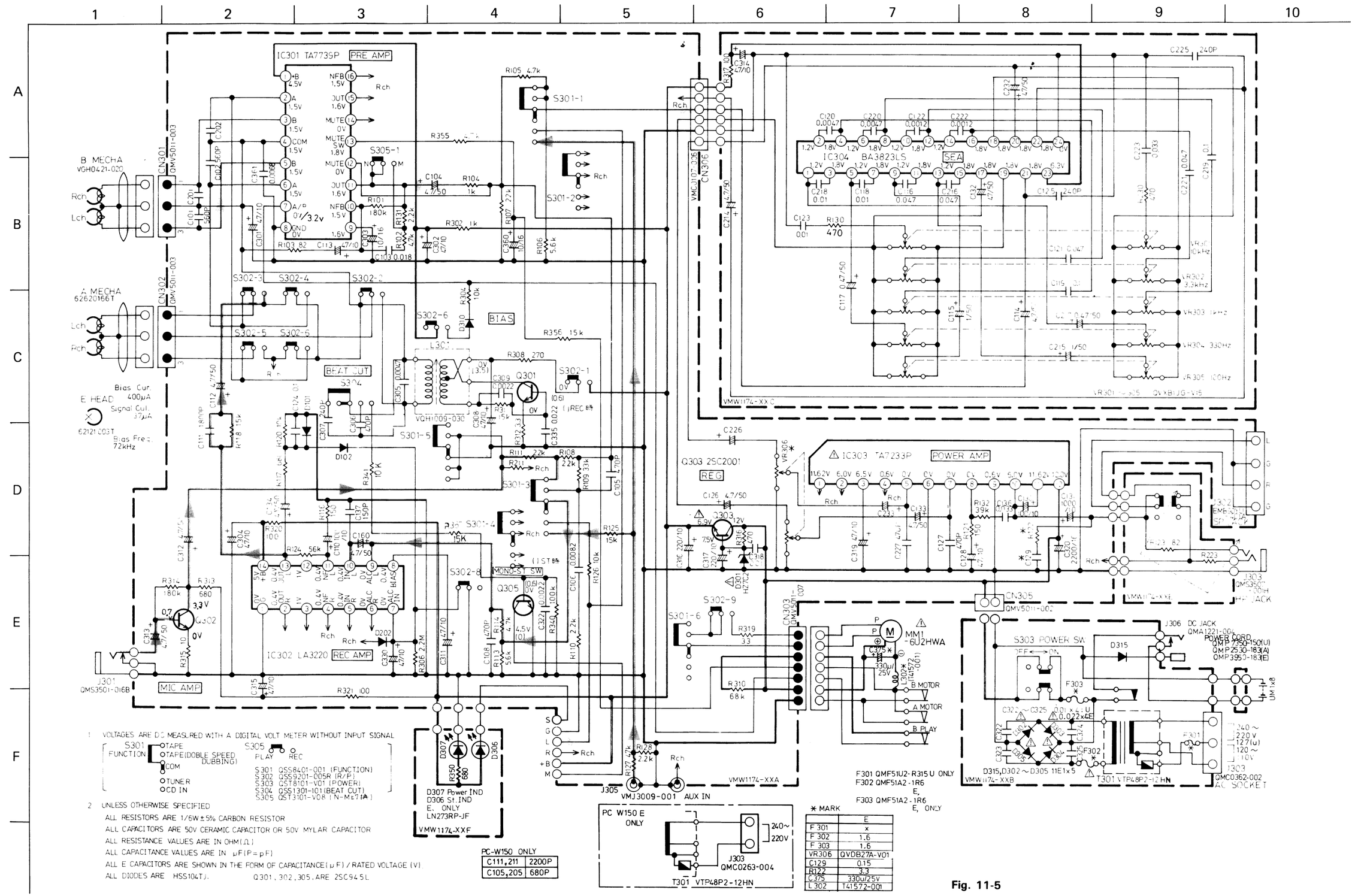


Fig. 11-4

(Amplifier Sections: E version)



1 VOLTAGES ARE DC MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL

2 UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE 1/6W±5% CARBON RESISTOR
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR
ALL RESISTANCE VALUES ARE IN OHM(Ω)
ALL CAPACITANCE VALUES ARE IN μF(P=pF)
ALL E CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF) / RATED VOLTAGE (V)
ALL DIODES ARE HSS104TJ. Q301, 302, 305, ARE 2SC945L

Fig. 11-5

12 Location of P.C. Board Parts and Parts List

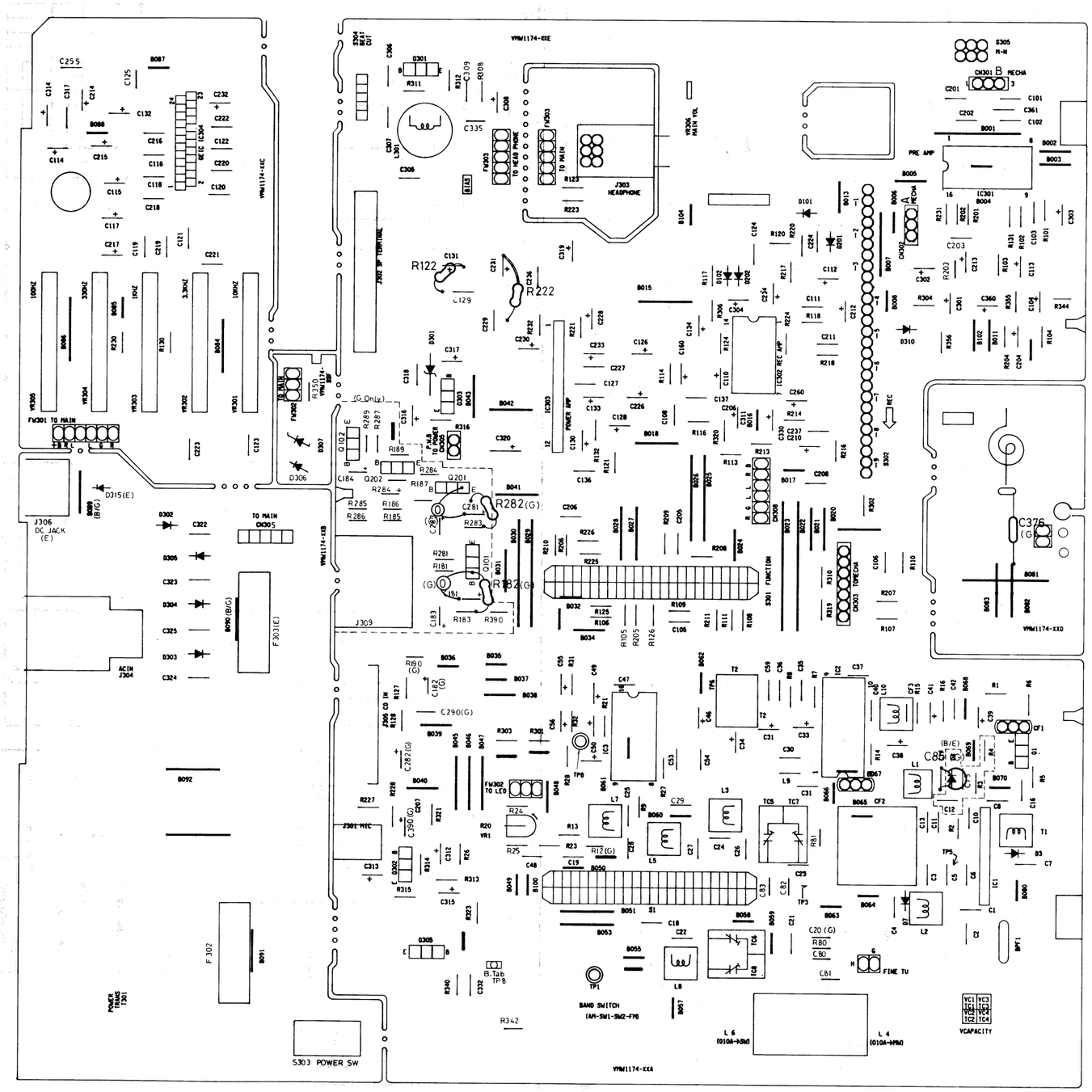


Fig. 12-1

■ **Main P.C. Board Parts List: B/E Version** ⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	BPF1	VBP4M3B-006	BP FILTER		
	CN301	QMV5011-003	CONNECTOR	30	
	CN302	QMV5011-003	CONNECTOR	30	
	CN303	QMV5011-007	CONNECTOR	60	
	CN305	QMV5011-002	CONNECTOR	30	
	CN308	VMC0107-006	SOCKET	90	
	C001	QCS11HJ-200	C.CAPACITOR		20PF 5% 50V
	C002	QCVB1CN-103Y	C.CAPACITOR	30	.010MF 30% 16V
	C003	QCS11HJ-220	C.CAPACITOR	30	22PF 5% 50V
	C004	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C005	QCS11HJ-150	C.CAPACITOR	30	15PF 5% 50V
	C006	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C007	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C008	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C010	QCT05CH-180	C.CAPACITOR	50	18PF 5% 50V
	C011	QCT05CH-100	C.CAPACITOR	50	10PF 5% 50V
	C012	QCT30CH-5R6Y	C.CAPACITOR	50	5.6PF 5% 50V
	C013	QCT05CH-220	C CAPACITOR	50	22PF 5% 50V
	C014	QCT30UJ-6R8Y	C.CAPACITOR	50	6.8PF 5% 50V
	C015	QCC11EM-103	C.CAPACITOR		.010MF 20% 25V
	C016	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C018	QCBB1HK-101Y	C.CAPACITOR	30	100PF 10% 50V
	C019	QCT30CH-2R7Y	C.CAPACITOR	50	2.7PF 5% 50V
	C020	QCT05UJ-150	C.CAPACITOR	50	15PF 5% 50V
	C021	QCT05UJ-150	C.CAPACITOR	50	15PF 5% 50V
	C022	QCS11HJ-8R0	C.CAPACITOR	30	8.0PF 5% 50V
	C023	QCS11HJ-330	C.CAPACITOR	30	33PF 5% 50V
	C024	QCT30UJ-100Y	C CAPACITOR	50	10PF 5% 50V
	C025	QCT05YL-7R0	C CAPACITOR	50	7.0PF 5% 50V
	C026	QFP31HJ-181ZM	PP CAPACITOR	50	180PF 5% 50V
	C027	QFP41HJ-361	PP.CAPACITOR		360PF 5% 50V
	C028	QCY41HK-392	C.CAPACITOR	30	3900PF 10% 50V
	C029	QCVB1CN-103Y	C.CAPACITOR	30	.010MF 30% 16V
	C030	QCS11HJ-120	C.CAPACITOR	30	12PF 5% 50V
	C031	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C032	QETC1AM-476ZM	E.CAPACITOR	60	47MF 20% 10V
	C033	QETC1HM-475ZM	E.CAPACITOR	60	4.7MF 20% 50V
	C034	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C035	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C036	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C037	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C038	QETC1CM-106ZM	E.CAPACITOR	60	10MF 20% 16V
	C039	QETC1CM-106ZM	E.CAPACITOR	60	10MF 20% 16V
	C040	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C041	QETC1AM-227ZM	E.CAPACITOR	90	220MF 20% 10V
	C042	QCS11HJ-331	C.CAPACITOR	30	330PF 5% 50V
	C046	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C047	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C048	QFP31HJ-471ZM	PP.CAPACITOR	50	470PF 5% 50V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C049	QETA1HM-474	E CAPACITOR	60	.47MF 20% 50V
	C050	QETC1HM-474ZM	E.CAPACITOR	60	.47MF 20% 50V
	C051	QETC1HM-475ZM	E.CAPACITOR	60	4.7MF 20% 50V
	C053	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C054	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C055	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C056	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C059	QCBB1HK-101Y	C.CAPACITOR	30	100PF 10% 50V
	C080	QCS11HJ-4R0	C.CAPACITOR	30	4.0PF 5% 50V
	C081	QCS11HJ-390	C.CAPACITOR	30	39PF 5% 50V
	C082	QCS11HJ-4R0	C.CAPACITOR	30	4.0PF 5% 50V
	C083	QCS11HJ-4R0	C.CAPACITOR	30	4.0PF 5% 50V
	C101	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C102	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C103	QCC31EM-183ZV	C.CAPACITOR	50	.018MF 20% 25V
	C104	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C105	QCS11HJ-681	C CAPACITOR	30	680PF 5% 50V
	C106	QCY41HK-822	C.CAPACITOR	30	8200PF 10% 50V
	C108	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C110	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C111	QCY41HK-222	C.CAPACITOR	30	2200PF 10% 50V
	C112	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C113	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C114	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C115	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C116	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C117	QETC1HM-474ZN	E.CAPACITOR	60	.47MF 20% 50V
	C118	QCC11EM-103	C.CAPACITOR		.010MF 20% 25V
	C119	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C120	QCY41HK-472	C.CAPACITOR	30	4700PF 10% 50V
	C121	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C122	QCY41HK-122	C.CAPACITOR	30	1200PF 10% 50V
	C123	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C124	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C125	QCS11HJ-221	C.CAPACITOR	30	220PF 5% 50V
	C126	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C127	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C128	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C129	QFV41HJ-154	TF.CAPACITOR	90	.15MF 5% 50V
	C130	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C131	QETB1AM-108	E CAPACITOR	200	1000MF 20% 10V
	C132	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C133	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C134	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C136	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C137	QCBB1HK-151Y	C.CAPACITOR	30	150PF 10% 50V
	C160	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C201	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C202	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C203	QCC31EM-183ZV	C.CAPACITOR	50	.018MF 20% 25V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C204	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C205	QCS11HJ-681	C CAPACITOR	30	680PF 5% 50V
	C206	QCY41HK-822	C.CAPACITOR	30	8200PF 10% 50V
	C208	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C210	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C211	QCY41HK-222	C.CAPACITOR	30	2200PF 10% 50V
	C212	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C213	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C214	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C215	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C216	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C217	QETC1HM-474ZN	E.CAPACITOR	60	.47MF 20% 50V
	C218	QCC11EM-103	C.CAPACITOR		.010MF 20% 25V
	C219	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C220	QCY41HK-472	C.CAPACITOR	30	4700PF 10% 50V
	C221	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C222	QCY41HK-122	C.CAPACITOR	30	1200PF 10% 50V
	C223	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C224	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C225	QCS11HJ-221	C.CAPACITOR	30	220PF 5% 50V
	C226	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C227	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C228	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C229	QFV41HJ-154	TF.CAPACITOR	90	.15MF 5% 50V
	C230	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C231	QETB1AM-108	E CAPACITOR	200	1000MF 20% 10V
	C232	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C233	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C234	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C236	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C237	QCBB1HK-151Y	C.CAPACITOR	30	150PF 10% 50V
	C260	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C301	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C302	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C303	QETC1CM-106ZN	E.CAPACITOR	60	10MF 20% 16V
	C304	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C305	QFN41HJ-472	M.CAPACITOR	50	4700PF 5% 50V
	C306	QCS11HJ-471	C.CAPACITOR	30	470PF 5% 50V
	C307	QCS11HJ-241	C CAPACITOR	30	240PF 5% 50V
	C308	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C311	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C312	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C313	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C314	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C315	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C316	QETC1AM-227ZN	E CAPACITOR	30	220MF 20% 10V
	C317	QETB1AM-227N	E CAPACITOR	90	220MF 20% 10V
	C318	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C319	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
⚠	C320	QETB1CM-228N	E.CAPACITOR	280	2200MF 20% 16V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C322	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C323	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C324	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C325	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C330	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C332	QCY41HK-182	C.CAPACITOR	30	1800PF 10% 50V
	C335	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C360	QETC1CM-106ZN	E.CAPACITOR	60	10MF 20% 16V
	C361	QCY41HK-682	C.CAPACITOR	30	6800PF 10% 50V
	D003	HSS104TJ	SI DIODE	20	
	D004	MA346	VC DIODE		
	D007	HSS104TJ	SI DIODE	20	
	D101	HSS104TJ	SI DIODE	20	
	D102	HSS104TJ	SI DIODE	20	
	D201	HSS104TJ	SI DIODE	20	
	D202	HSS104TJ	SI DIODE	20	
⚠	D302	11E1	SI.DIODE		
⚠	D303	11E1	SI.DIODE		
⚠	D304	11E1	SI.DIODE		
⚠	D305	11E1	SI.DIODE		
	D306	LN273RPH-J1	LED	100	
	D307	LN273RPH-J1	LED	100	
	D310	HSS104TJ	SI DIODE	20	
	IC001	TA7358P(N)	IC	200	
	IC002	AN7222N	IC	470	
	IC003	AN7410N	IC	360	
	IC1	TA7358P(N)	IC	200	
	IC2	AN7222N	IC	470	
	IC3	AN7410N	IC	360	
	IC301	TA7739P	IC	280	
	IC302	LA3220	IC	280	
⚠	IC303	TA7233P	I.C.	500	
	IC304	BA3823LS	IC	260	
	J301	QMS3501-016B	JACK	90	
	J302	EMB90YV-401A	SPK.TERMINAL	200	
	J303	EMB90YV-401A	SPK.TERMINAL	200	
⚠	J304	QMC0263-004BS	AC SOCKET	230	
	J305	VMJ3009-001	JACK ASSY	70	
	L001	V03105-029	OSC COIL	70	
	L002	VQF1B12-007	RF COIL	100	
	L003	VQL7T19-301	OSC COIL	90	
	L005	VQM7U01-301	OSC COIL	90	
	L007	VQS7U01-305	OSC COIL	130	
	L008	VQR7002-302	RF COIL	90	
	L009	VQC1304-001	COIL	30	
	L010	VQP0012-100	INDUCTOR	60	
	L046	VQB010B-309T	BAR ANTENA	500	
	L301	VQH1009-030	OSC COIL(BIAS)	120	
	Q001	2SC1923	TRANSISTOR		
	Q301	2SC945L(P,Q)	TRANSISTOR		

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	Q302	2SC945L(P,Q)	TRANSISTOR		
⚠	Q303	2SC2001(L,K)	TRANSISTOR		
	Q305	2SC945L(P,Q)	TRANSISTOR		
	R001	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R002	QRD161J-220	CARBON RESISTOR	20	22 5% 1/6W
	R003	QRD161J-104	CARBON RESISTOR	20	100K 5% 1/6W
	R004	QRD161J-104	CARBON RESISTOR	20	100K 5% 1/6W
	R005	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R006	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R007	QRD143J-561S	CARBON RESISTOR	20	560 5% 1/4W
	R008	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R009	QRD161J-560	CARBON RESISTOR	20	56 5% 1/6W
	R013	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R014	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R015	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R016	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R020	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R021	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R023	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R024	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R025	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R026	QRD161J-560	CARBON RESISTOR	20	56 5% 1/6W
	R027	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R028	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R031	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R032	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R080	QRD161J-274	CARBON RESISTOR	20	270K 5% 1/6W
	R081	QRD161J-563	CARBON RESISTOR	20	56K 5% 1/6W
	R101	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R102	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R103	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R104	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R105	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R106	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R107	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R108	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R109	QRD161J-333	CARBON RESISTOR	20	33K 5% 1/6W
	R110	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R111	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R113	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R114	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R116	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R117	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R118	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R120	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R121	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R122	QRD161J-3R3	C RESISTOR	20	3.3 5% 1/6W
	R123	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R124	QRD161J-273	CARBON RESISTOR	20	27K 5% 1/6W
	R125	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	R126	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R127	QRD161J-473	CARBON RESISTOR	20	47K 5% 1/6W
	R128	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R130	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R131	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R132	QRD143J-393S	CARBON RESISTOR	20	39K 5% 1/4W
	R201	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R202	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R203	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R204	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R205	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R206	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R207	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R208	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R209	QRD161J-333	CARBON RESISTOR	20	33K 5% 1/6W
	R210	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R211	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R213	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R214	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R216	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R217	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R218	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R220	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R221	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R222	QRD161J-3R3	C RESISTOR	20	3.3 5% 1/6W
	R223	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R224	QRD161J-273	CARBON RESISTOR	20	27K 5% 1/6W
	R225	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R226	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R227	QRD161J-473	CARBON RESISTOR	20	47K 5% 1/6W
	R228	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R230	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R231	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R232	QRD143J-393S	CARBON RESISTOR	20	39K 5% 1/4W
	R301	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R302	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R303	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R304	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R306	QRD143J-225S	CARBON RESISTOR	20	2.2M 5% 1/4W
	R308	QRD143J-271S	CARBON RESISTOR	20	270 5% 1/4W
	R310	QRD143J-683S	CARBON RESISTOR	20	68K 5% 1/4W
	R311	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R312	QRD161J-3R3	CARBON RESISTOR	20	3.3 5% 1/6W
	R313	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R314	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R315	QRD143J-100S	CARBON RESISTOR	20	10 5% 1/4W
	R316	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R317	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R319	QRD143J-330S	CARBON RESISTOR	20	33 5% 1/4W
	R320	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	R321	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R323	QRZ0062-270	F.RES. ********	30	27 1/0W
	R340	QRD161J-104	CARBON RESISTOR	20	100K 5% 1/6W
	R342	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R344	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R350	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R355	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R356	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	S001	QSS8401-001	SLIDE SWITCH	350	
	S1	QSS8401-001	SLIDE SWITCH	350	
⚠	S301	QST8101-V01	PUSH SW	140	
	S302	QSS8401-001	SLIDE SWITCH	350	
⚠	S303	QST8101-V01	PUSH SW	140	
	S304	QSS9201-005R	SLIDE SWITCH	200	
	S305	QSS1301-101	SLIDE SWITCH	200	
	TC5,7	QAT2002-001S	T.CAPACITOR		
	TC6,8	QAT2002-001S	T.CAPACITOR		
	T001	VQT7F12-108	IFT	90	
	T2	VQT7A21-103	IFT	280	
	VC1	QAP1224-215	V CAPACITOR	700	
	VC5	QAT5001-003S	T.CAPACITOR		
	VR001	QVZ3512-502	V.RESISTOR	60	
	VR301	QVXB1JG-V15	V.RESISTOR	170	
	VR302	QVXB1JG-V15	V.RESISTOR	170	
	VR303	QVXB1JG-V15	V.RESISTOR	170	
	VR304	QVXB1JG-V15	V.RESISTOR	170	
	VR305	QVXB1JG-V15	V.RESISTOR	170	
	VR306	QVDB27A-V01	V.RESISTOR	200	
	CF01,02	V03059-3	C. FILTER		
	CF03	VCF1Z2Z-301	〃		

■ **Main P.C. Board Parts List: G Version** ⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	26	SBSF3008Z	SCREW	10	
	73	VYH6718-001	NEEDLE HOLDER	50	
	95	VYH5483-001	BATTERY SPRING	70	
	BPF1	VBP4M3B-006	BP FILTER		
	CN301	QMV5011-003	CONNECTOR	30	
	CN302	QMV5011-003	CONNECTOR	30	
	CN303	QMV5011-007	CONNECTOR	60	
	CN305	QMV5011-002	CONNECTOR	30	
	CN308	VMC0107-006	SOCKET	90	
	C001	QCS11HJ-200	C.CAPACITOR		20PF 5% 50V
	C002	QCVB1CN-103Y	C.CAPACITOR	30	.010MF 30% 16V
	C003	QCS11HJ-240	C.CAPACITOR	30	24PF 5% 50V
	C004	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C005	QCS11HJ-150	C.CAPACITOR	30	15PF 5% 50V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C006	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C007	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C008	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C010	QCT05CH-180	C.CAPACITOR	50	18PF 5% 50V
	C011	QCT05CH-100	C.CAPACITOR	50	10PF 5% 50V
	C013	QCT30UJ-2R2Y	C CAPACITOR		2.2PF 5% 50V
	C014	QCT05CH-300	C CAPACITOR	50	30PF 5% 50V
	C016	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C018	QCS11HJ-240	C.CAPACITOR	30	24PF 5% 50V
	C019	QCT30CH-2R2Y	C.CAPACITOR	50	2.2PF 5% 50V
	C020	QCS11HJ-820	C.CAPACITOR	30	82PF 5% 50V
	C021	QCT05UJ-150	C.CAPACITOR	50	15PF 5% 50V
	C022	QCS11HJ-100	C.CAPACITOR	30	10PF 5% 50V
	C023	QCS11HJ-680	C.CAPACITOR	30	68PF 5% 50V
	C024	QCT30UJ-100Y	C CAPACITOR	50	10PF 5% 50V
	C025	QCT05YL-7R0	C CAPACITOR	50	7.0PF 5% 50V
	C026	QFP31HJ-181ZM	PP CAPACITOR	50	180PF 5% 50V
	C027	QFP41HJ-361	PP.CAPACITOR		360PF 5% 50V
	C028	QCY41HK-392	C.CAPACITOR	30	3900PF 10% 50V
	C029	QCVB1CN-103Y	C.CAPACITOR	30	.010MF 30% 16V
	C030	QCS11HJ-120	C.CAPACITOR	30	12PF 5% 50V
	C031	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C032	QETC1AM-476ZM	E.CAPACITOR	60	47MF 20% 10V
	C033	QETC1HM-475ZM	E.CAPACITOR	60	4.7MF 20% 50V
	C034	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C035	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C036	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C037	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C038	QETC1CM-106ZM	E.CAPACITOR	60	10MF 20% 16V
	C039	QETC1CM-106ZM	E.CAPACITOR	60	10MF 20% 16V
	C040	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C041	QETC1AM-227ZM	E.CAPACITOR	90	220MF 20% 10V
	C042	QCS11HJ-331	C.CAPACITOR	30	330PF 5% 50V
	C046	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C047	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C048	QFP31HJ-471ZM	PP.CAPACITOR	50	470PF 5% 50V
	C049	QETA1HM-474	E CAPACITOR	60	.47MF 20% 50V
	C050	QETC1HM-474ZM	E.CAPACITOR	60	.47MF 20% 50V
	C051	QETC1HM-475ZM	E.CAPACITOR	60	4.7MF 20% 50V
	C053	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C054	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C055	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C056	QETC1HM-105ZM	E.CAPACITOR	60	1.0MF 20% 50V
	C059	QCBB1HK-101Y	C.CAPACITOR	30	100PF 10% 50V
	C101	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C102	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C103	QCC31EM-183ZV	C.CAPACITOR	50	.018MF 20% 25V
	C104	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C105	QCS11HJ-681	C CAPACITOR	30	680PF 5% 50V
	C106	QCY41HK-822	C.CAPACITOR	30	8200PF 10% 50V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C108	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C110	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C111	QCY41HK-222	C.CAPACITOR	30	2200PF 10% 50V
	C112	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C113	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C114	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C115	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C116	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C117	QETC1HM-474ZN	E.CAPACITOR	60	.47MF 20% 50V
	C118	QCC11EM-103	C.CAPACITOR		.010MF 20% 25V
	C119	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C120	QCY41HK-472	C.CAPACITOR	30	4700PF 10% 50V
	C121	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C122	QCY41HK-122	C.CAPACITOR	30	1200PF 10% 50V
	C123	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C124	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C125	QCS11HJ-221	C.CAPACITOR	30	220PF 5% 50V
	C126	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C127	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C128	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C129	QFV41HJ-154	TF.CAPACITOR	90	.15MF 5% 50V
	C130	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C131	QETB1AM-108	E CAPACITOR	200	1000MF 20% 10V
	C132	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C133	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C134	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C136	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C137	QCBB1HK-151Y	C.CAPACITOR	30	150PF 10% 50V
	C160	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C181	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C182	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C183	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C184	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C201	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C202	QCS11HJ-561	C.CAPACITOR	30	560PF 5% 50V
	C203	QCC31EM-183ZV	C.CAPACITOR	50	.018MF 20% 25V
	C204	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C205	QCS11HJ-681	C CAPACITOR	30	680PF 5% 50V
	C206	QCY41HK-822	C.CAPACITOR	30	8200PF 10% 50V
	C208	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C210	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C211	QCY41HK-222	C.CAPACITOR	30	2200PF 10% 50V
	C212	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C213	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C214	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C215	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C216	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C217	QETC1HM-474ZN	E.CAPACITOR	60	.47MF 20% 50V
	C218	QCC11EM-103	C.CAPACITOR		.010MF 20% 25V
	C219	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C220	QCY41HK-472	C.CAPACITOR	30	4700PF 10% 50V
	C221	QCC11EM-473	C.CAPACITOR		.047MF 20% 25V
	C222	QCY41HK-122	C.CAPACITOR	30	1200PF 10% 50V
	C223	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C224	QCC11EM-104	C.CAPACITOR		.10MF 20% 25V
	C225	QCS11HJ-221	C.CAPACITOR	30	220PF 5% 50V
	C226	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C227	QCBB1HK-471Y	C.CAPACITOR	30	470PF 10% 50V
	C228	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C229	QFV41HJ-154	TF.CAPACITOR	90	.15MF 5% 50V
	C230	QETC1AM-107ZN	E.CAPACITOR	30	100MF 20% 10V
	C231	QETB1AM-108	E CAPACITOR	200	1000MF 20% 10V
	C232	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C233	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C234	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C236	QCC11EM-333	C.CAPACITOR	50	.033MF 20% 25V
	C237	QCBB1HK-151Y	C.CAPACITOR	30	150PF 10% 50V
	C260	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C281	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C282	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C283	QETC1HM-105ZN	E.CAPACITOR	60	1.0MF 20% 50V
	C284	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C301	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C302	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C303	QETC1CM-106ZN	E.CAPACITOR	60	10MF 20% 16V
	C304	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C305	QFN41HJ-472	M CAPACITOR	50	4700PF 5% 50V
	C306	QCS11HJ-471	C.CAPACITOR	30	470PF 5% 50V
	C307	QCS11HJ-241	C CAPACITOR	30	240PF 5% 50V
	C308	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C311	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C312	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C313	QETC1HM-475ZN	E.CAPACITOR	60	4.7MF 20% 50V
	C314	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C315	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C316	QETC1AM-227ZN	E CAPACITOR	30	220MF 20% 10V
	C317	QETB1AM-227N	E CAPACITOR	90	220MF 20% 10V
	C318	QCF11HP-103	C.CAPACITOR	30	.010MF +100:-0% 50V
	C319	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
⚠	C320	QETB1CM-228N	E.CAPACITOR	280	2200MF 20% 16V
	C322	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C323	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C324	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C325	QCF11HP-223	C.CAPACITOR	30	.022MF +100:-0% 50V
	C330	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C332	QCY41HK-182	C.CAPACITOR	30	1800PF 10% 50V
	C335	QCC11EM-223	C.CAPACITOR		.022MF 20% 25V
	C360	QETC1CM-106ZN	E.CAPACITOR	60	10MF 20% 16V
	C361	QCY41HK-682	C.CAPACITOR	30	6800PF 10% 50V
	C376	QCBB1HK-151Y	C.CAPACITOR	30	150PF 10% 50V

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	C390	QETC1AM-476ZN	E.CAPACITOR	60	47MF 20% 10V
	C80	QCS11HJ-3R0	C.CAPACITOR	30	3.0PF 5% 50V
	C81	QCS11HJ-3R0	C.CAPACITOR	30	3.0PF 5% 50V
	C82	QCS11HJ-8R0	C.CAPACITOR	30	8.0PF 5% 50V
	C83	QCS11HJ-8R0	C.CAPACITOR	30	8.0PF 5% 50V
	D003	HSS104TJ	SI DIODE	20	
	D007	HSS104TJ	SI DIODE	20	
	D101	HSS104TJ	SI DIODE	20	
	D102	HSS104TJ	SI DIODE	20	
	D201	HSS104TJ	SI DIODE	20	
	D202	HSS104TJ	SI DIODE	20	
⚠	D302	11E1	SI.DIODE		
⚠	D303	11E1	SI.DIODE		
⚠	D304	11E1	SI.DIODE		
⚠	D305	11E1	SI.DIODE		
	D306	LN273RPH-J1	LED	100	
	D307	LN273RPH-J1	LED	100	
	D310	HSS104TJ	SI DIODE	20	
	IC001	TA7358P(N)	IC	200	
	IC002	AN7222N	IC	470	
	IC003	AN7410N	IC	360	
	IC1	TA7358P(N)	IC	200	
	IC2	AN7222N	IC	470	
	IC3	AN7410N	IC	360	
	IC301	TA7739P	IC	280	
	IC302	LA3220	IC	280	
⚠	IC303	TA7233P	I.C.	500	
	IC304	BA3823LS	IC	260	
	J301	QMS3501-016B	JACK	90	
	J302	EMB90YV-401A	SPK.TERMINAL	200	
	J303	EMB90YV-401A	SPK.TERMINAL	200	
⚠	J304	QMC0263-004	AC SOCKET	230	
	J305	VMJ3009-001	JACK ASSY	70	
	J309	QMC9014-006	DIN SOCKET	230	
	L001	V03105-029	OSC COIL	70	
	L002	VQF1B12-007	RF COIL	100	
	L003	VQL7T19-301	OSC COIL	90	
	L005	VQM7U01-301	OSC COIL	90	
	L007	VQS7U01-305	OSC COIL	130	
	L008	VQR7002-302	RF COIL	90	
	L009	VQC1304-001	COIL	30	
	L010	VQP0012-100	INDUCTOR	60	
	L046	VQB010B-309T	BAR ANTENA	500	
	L301	VQH1009-030	OSC COIL(BIAS)	120	
	Q001	2SC1923	TRANSISTOR		
	Q101	2SC945L(P,Q)	TRANSISTOR		
	Q102	2SC945L(P,Q)	TRANSISTOR		
	Q201	2SC945L(P,Q)	TRANSISTOR		
	Q202	2SC945L(P,Q)	TRANSISTOR		
	Q301	2SC945L(P,Q)	TRANSISTOR		

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	Q302	2SC945L(P,Q)	TRANSISTOR		
⚠	Q303	2SC2001(L,K)	TRANSISTOR		
	Q305	2SC945L(P,Q)	TRANSISTOR		
	R001	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R002	QRD161J-220	CARBON RESISTOR	20	22 5% 1/6W
	R005	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R006	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R007	QRD143J-561S	CARBON RESISTOR	20	560 5% 1/4W
	R008	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R009	QRD161J-560	CARBON RESISTOR	20	56 5% 1/6W
	R012	QRD161J-152	CARBON RESISTOR	20	1.5K 5% 1/6W
	R013	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R014	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R015	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R016	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R020	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R021	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R023	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R024	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R025	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R026	QRD161J-560	CARBON RESISTOR	20	56 5% 1/6W
	R027	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R028	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R031	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R032	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R080	QRD143J-274S	CARBON RESISTOR	20	270K 5% 1/4W
	R081	QRD161J-563	CARBON RESISTOR	20	56K 5% 1/6W
	R101	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R102	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R103	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R104	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R105	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R106	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R107	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R108	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R109	QRD161J-333	CARBON RESISTOR	20	33K 5% 1/6W
	R110	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R111	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R113	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R114	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R116	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R117	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R118	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R120	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R121	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R122	QRD161J-3R3	C RESISTOR	20	3.3 5% 1/6W
	R123	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R124	QRD161J-273	CARBON RESISTOR	20	27K 5% 1/6W
	R125	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R126	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	R127	QRD161J-473	CARBON RESISTOR	20	47K 5% 1/6W
	R128	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R130	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R131	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R132	QRD143J-393S	CARBON RESISTOR	20	39K 5% 1/4W
	R181	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R182	QRD161J-105	CARBON RESISTOR	20	1.0M 5% 1/6W
	R183	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R184	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R185	QRD161J-123	CARBON RESISTOR	20	12K 5% 1/6W
	R186	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R187	QRD161J-105	CARBON RESISTOR	20	1.0M 5% 1/6W
	R189	QRD161J-821	CARBON RESISTOR	20	820 5% 1/6W
	R190	QRD143J-822S	CARBON RESISTOR	20	8.2K 5% 1/4W
	R201	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R202	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R203	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R204	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R205	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R206	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R207	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R208	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R209	QRD161J-333	CARBON RESISTOR	20	33K 5% 1/6W
	R210	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R211	QRD161J-223	CARBON RESISTOR	20	22K 5% 1/6W
	R213	QRD161J-562	CARBON RESISTOR	20	5.6K 5% 1/6W
	R214	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R216	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R217	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R218	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R220	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R221	QRD161J-151	CARBON RESISTOR	20	150 5% 1/6W
	R222	QRD161J-3R3	C RESISTOR	20	3.3 5% 1/6W
	R223	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R224	QRD161J-273	CARBON RESISTOR	20	27K 5% 1/6W
	R225	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R226	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R227	QRD161J-473	CARBON RESISTOR	20	47K 5% 1/6W
	R228	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R230	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R231	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R232	QRD143J-393S	CARBON RESISTOR	20	39K 5% 1/4W
	R281	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R282	QRD161J-105	CARBON RESISTOR	20	1.0M 5% 1/6W
	R283	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R284	QRD161J-820	CARBON RESISTOR	20	82 5% 1/6W
	R285	QRD161J-123	CARBON RESISTOR	20	12K 5% 1/6W
	R286	QRD161J-222	CARBON RESISTOR	20	2.2K 5% 1/6W
	R287	QRD161J-105	CARBON RESISTOR	20	1.0M 5% 1/6W
	R289	QRD161J-821	CARBON RESISTOR	20	820 5% 1/6W

⚠	REF.	PARTS NO.	PARTS NAME		REMARKS
	R290	QRD143J-822S	CARBON RESISTOR	20	8.2K 5% 1/4W
	R301	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R302	QRD161J-102	CARBON RESISTOR	20	1.0K 5% 1/6W
	R303	QRD161J-332	CARBON RESISTOR		3.3K 5% 1/6W
	R304	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R306	QRD143J-225S	CARBON RESISTOR	20	2.2M 5% 1/4W
	R308	QRD143J-271S	CARBON RESISTOR	20	270 5% 1/4W
	R310	QRD143J-683S	CARBON RESISTOR	20	68K 5% 1/4W
	R311	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R312	QRD143J-3R3S	CARBON RESISTOR	20	3.3 5% 1/4W
	R313	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R314	QRD161J-184	CARBON RESISTOR	20	180K 5% 1/6W
	R315	QRD143J-100S	CARBON RESISTOR	20	10 5% 1/4W
	R316	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	R317	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R319	QRD143J-330S	CARBON RESISTOR	20	33 5% 1/4W
	R320	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R321	QRD161J-101	CARBON RESISTOR	10	100 5% 1/6W
	R323	QRZ0062-270	F.RES. ********	30	27 1/0W
	R340	QRD143J-104S	CARBON RESISTOR	20	100K 5% 1/4W
	R342	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R344	QRD161J-103	CARBON RESISTOR	20	10K 5% 1/6W
	R350	QRD161J-681	CARBON RESISTOR	20	680 5% 1/6W
	R355	QRD161J-472	CARBON RESISTOR	20	4.7K 5% 1/6W
	R356	QRD161J-153	CARBON RESISTOR	20	15K 5% 1/6W
	R390	QRD161J-471	CARBON RESISTOR	20	470 5% 1/6W
	S001	QSS8401-001	SLIDE SWITCH	350	
	S1	QSS8401-001	SLIDE SWITCH	350	
⚠	S301	QST8101-V01	PUSH SW	140	
	S302	QSS8401-001	SLIDE SWITCH	350	
⚠	S303	QST8101-V01	PUSH SW	140	
	S304	QSS9201-005R	SLIDE SWITCH	200	
	S305	QSS1301-101	SLIDE SWITCH	200	
	TC5,7	QAT2002-001S	T.CAPACITOR		
	TC6,8	QAT2002-001S	T.CAPACITOR		
	T001	VQT7F12-108	IFT	90	
	T2	VQT7A21-103	IFT	280	
	VC1	QAP1224-215	V CAPACITOR	700	
	VC5	QAT5001-003S	T.CAPACITOR		
	VR001	QVZ3512-502	V.RESISTOR	60	
	VR301	QVXB1JG-V15	V.RESISTOR	170	
	VR302	QVXB1JG-V15	V.RESISTOR	170	
	VR303	QVXB1JG-V15	V.RESISTOR	170	
	VR304	QVXB1JG-V15	V.RESISTOR	170	
	VR305	QVXB1JG-V15	V.RESISTOR	170	
	VR306	QVDB27A-V01	V.RESISTOR	200	
	CF01,02	V03059-3	C. FILTER		
	CF03	VCF1Z2Z-301	〃		

13 Exploded View of Speaker Box and Parts List

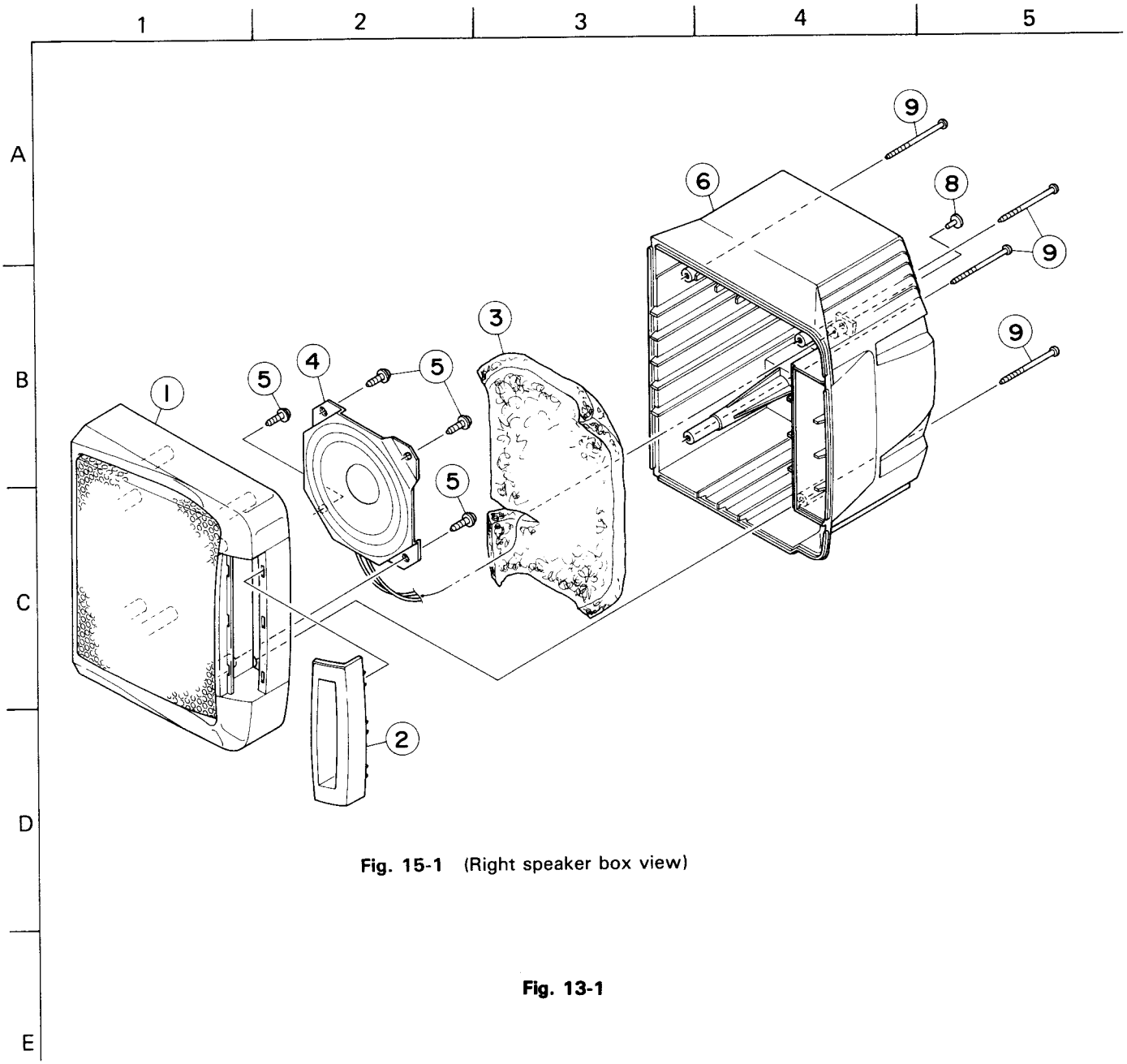


Fig. 15-1 (Right speaker box view)

Fig. 13-1

■ Speaker Box Parts List

⚠	REF. NO.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1	VJC2328-00D	SPEAKER PANEL ASS'Y (R)	RIGHT SIDE	1
		VJC2327-00D	SPEAKER PANEL ASS'Y (L)	LEFT SIDE	1
	2	VJD3839-002	GRILL (R)		1
		VJD3839-001	GRILL (L)		1
	3	VKZ4389-002	SOUND ABSOBER		2
	4	EAS10P457A	SPEAKER	SP201, SP101	2
	5	GBSF3010Z	TAPPING SCREW	FOR SPEAKER	8
	6	VJC1701-501	SPEAKER REAR CABINET (R)	RIGHT SIDE	1
		VJC1699-501	SPEAKER REAR CABINET (L)	LEFT SIDE	1
	7	VMP0040-001T	SPEAKER CODE		2
	8	TEP357469-02	STOPPER		2
	9	SBSF3045Z	SCREW	FRONT/REAR CABI.	8

14 Exploded View of Mechanism Component and Parts List

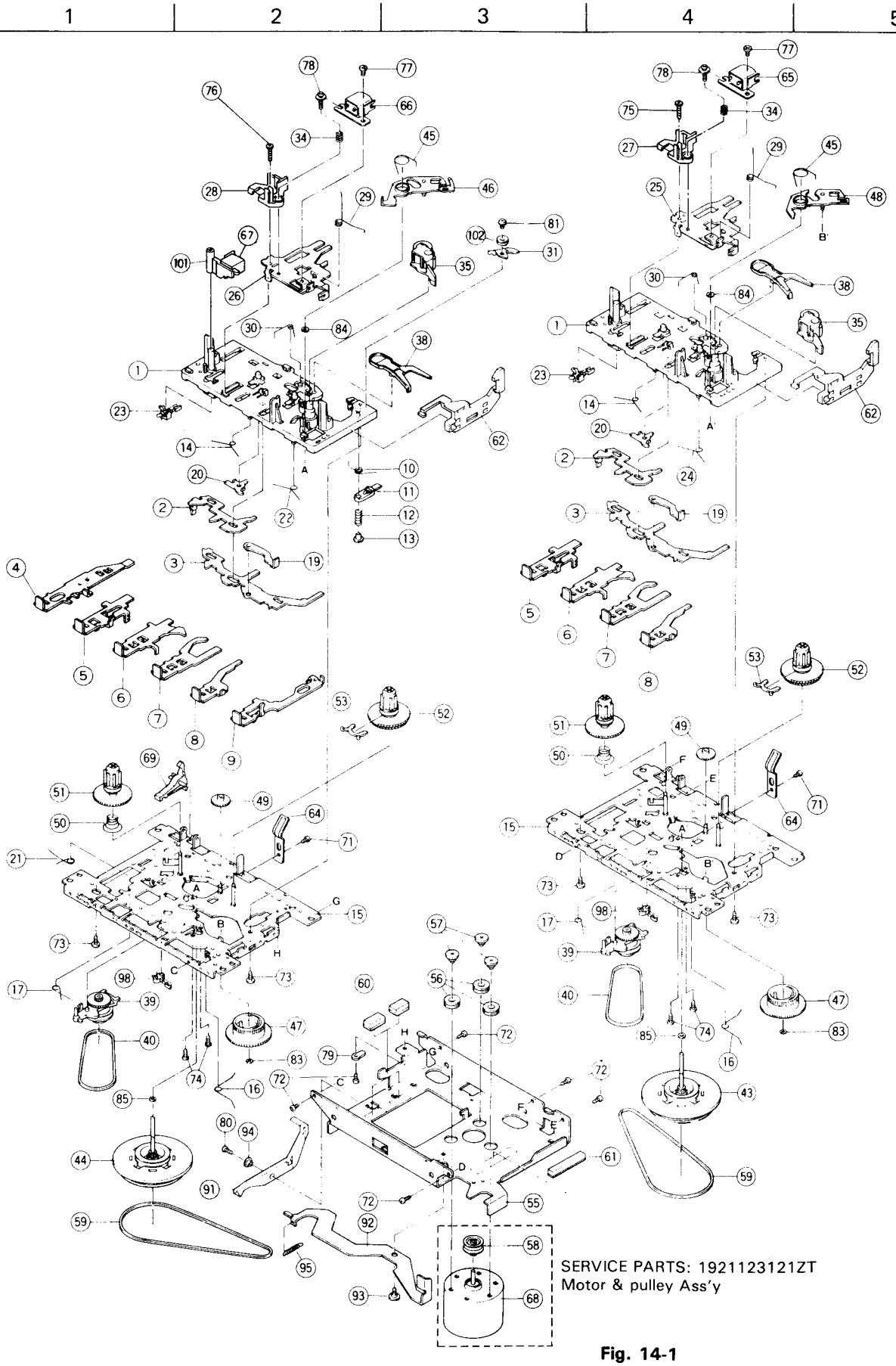


Fig. 14-1

■ Mechanism Component Parts List

(1/2)

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	58,68	1921123121ZT	MOTOR ASS'Y	FOR SERVICE PARTS	1
	1	192114301T	BASE ASS'Y		2
	2	19211409T	SWITCH PLATE		2
	3	19211438T	LOCK CAM		2
	4	19211422T	BUTTON LEVER	FOR REC.(MECHA.A)	1
	5	19211484T	BUTTON LEVER	FOR PLAY	2
	6	19211424T	BUTTON LEVER	FOR REWIND	2
	7	19211425T	BUTTON LEVER	FOR F.FOWARD	2
	8	19211426T	BUTTON LEVER	FOR STOP	2
	9	19211461T	BUTTON LEVER	FOR PAUSE(MECHA.A	1
	10	19211413AT	P CONT. SPRING	PAUSE LEVER(MECHA	1
	11	19211455T	PAUSE LEVER (E)	FOR MECHA.A ONLY	1
	12	19211412T	SPRING	PAUSE LEVER(MECHA	1
	13	19211411T	PAUSE STOPPER	PAUSE LEVER(MECHA	1
	14	19211414T	TORSION SPRING	F.FOWARD,REWIND	2
	15	192101501T	CHASSIS ASS'Y		2
	16	19211416T	TORSION SPRING	FOR STOP/EJECT LE	2
	17	19211417T	TORSION SPRING	FOR PLAY	2
	19	182101159T	E.KICK LEVER	FOR EJECT	2
	20	19211420T	STTOPPER	PINCH ROLLER ASS'	2
	21	19211421T	TORSION SPRING	FOR REC.(MECHA.A)	1
	22	19211414T	TORSION SPRING	PAUSE,STOP(MECHA.	1
	23	640101149T	LEAF SWITCH	MSW-1541T	2
	24	19211433T	TORSION SPRING	FOR STOP	1
	25	19210311T	HEAD PANEL		1
	26	19210311T	HEAD PANEL	FOR MECHANISM A	1
	27	19210304AT	HEAD BASE	FOR MECHANISM B	1
	28	19210304AT	HEAD BASE	FOR MECHANISM A	1
	29	19210309T	PANEL P SPRING	FOR HEAD PANEL	2
	30	19211418T	TORSION SPRING	FOR SENSING LEVER	2
	31	19211434T	P.ROLLER ARM		1
	34	18210307T	AZIMUTH SPRING	FOR PB,R/P HEAD	2
	35	192104301T	P.ROLLER ASS'Y		2
	38	19212604T	SENSING LEVER		2
	39	192107302T	RF CLUTCH ASS'Y		2
	40	19210703T	REW/F.F. BELT		2
	43	192109310T	FLYWHEEL ASS'Y	FOR MECHANISM B	1
	44	192109309T	FLYWHEEL ASS'Y		1
	45	19212605T	TORSION SPRING	FOR GEAR PLATE AS	2
	46	192126502T	GEAR PLATE ASY.	FOR MECHANISM A	1
	47	19212602T	CAM GEAR		2
	48	192126502T	GEAR PLATE ASY.		1
	49	18211070T	F.FORWARD GEAR		2
	50	18291010T	BACK TENS. SP.	FOR SUPPLY REEL A	2
	51	192105304T	SUPPLY REEL ASY		2
	52	192105303T	TAKEUP REEL ASY		2

(2/2)

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	53	19210506T	SENSER	FOR T-UP REEL ASS	2
	55	19211210T	MOTOR BRACKET		1
	56	18211266T	MOTOR RUBBER	FOR MOTOR	3
	57	18511418T	COLLAR SCREW	FOR MOTOR	3
	58	1921120AT	MOTOR PULLEY		1
	59	19210906T	MAIN BELT		2
	60	18211278T	MAT	FOR BELT CLEANER	2
	61	182112126T	ANTI V.FELT MAT	FOR BELT CLEANER	1
	62	19211302T	EJ. SLIDE LEVER	FOR EJECT	2
	64	18291001T	PACK SPRING		2
	65	VGH0421-020	R P P HEAD	FOR MECHANISM B	1
	66	62020166T	R/P HEAD	FOR MECHANISM A	1
	67	62121003T	ERASE HEAD	PARMANENT MAGNET	1
⚠	68	MMI-6U2HWA	MOTOR		1
	69	18211069T	REC.SAF.LEVER	FOR MECHANISM A	1
	71	91790000T	TAPPING SCREW	FOR PACK SPRING	2
	72	91800000T	SCREW	MOTOR BKT+CHASSIS	6
	73	96790000T	TAPPING SCREW	FOR BASE ASS'Y(2X	4
	74	99991809T	SPECIAL SCREW	FOR BASE ASS'Y 2X	4
	75	90040000T	SCREW(M2 X 6)	FOR HEAD BASE	1
	76	90040000T	SCREW(M2 X 6)	FOR HEAD BASE	2
	77	91150000T	SCREW(M2 X 3)	FOR PB,R/P HEAD	2
	78	99220000T	SCREW(M2 X 7)	FOR HEAD AZIMUTH	2
	79	94800000T	LUG	FOR MECHANISM B	1
	80	91820000T	SCREW	PLAY KICK LEVER B	1
	81	99992041T	SPECIAL SCREW	FOR PINCH ROLLER	1
	83	94220000T	POLY.CUT WASHER	FOR CAM GEAR	2
	84	99990313T	POLY.CUT WASHER	FOR CAPSTAN SHAFT	1
		99990313T	POLY.CUT WASHER		1
	85	97860000T	POLY WASHER	FOR FLYWHEEL ASS'	1
		97860000T	POLY WASHER		1
	91	19211209T	P KICK LEVER(B)	FOR PLAY KICK(SMO	1
	92	182112154T	P KICK LEVER A	FOR PLAY KICK(LAR	1
	93	18211223T	COLLAR SCREW	PLAY KICK LEVER A	1
	94	18211265T	COLLAR	PLAY KICK LEVER B	1
	95	18211225T	SPRING	PLAY KICK LEVER A	1
	98	640101161T	LEAF SWITCH	MOTOR CONTROL SWI	1
	101	18210305T	MAGNET ARM	FOR ERASE HEAD	1
	102	19211437T	P ARM COLLAR	FOR PINCH ROLLER	1

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

15 Exploded View of Enclosure Component Parts and Parts List

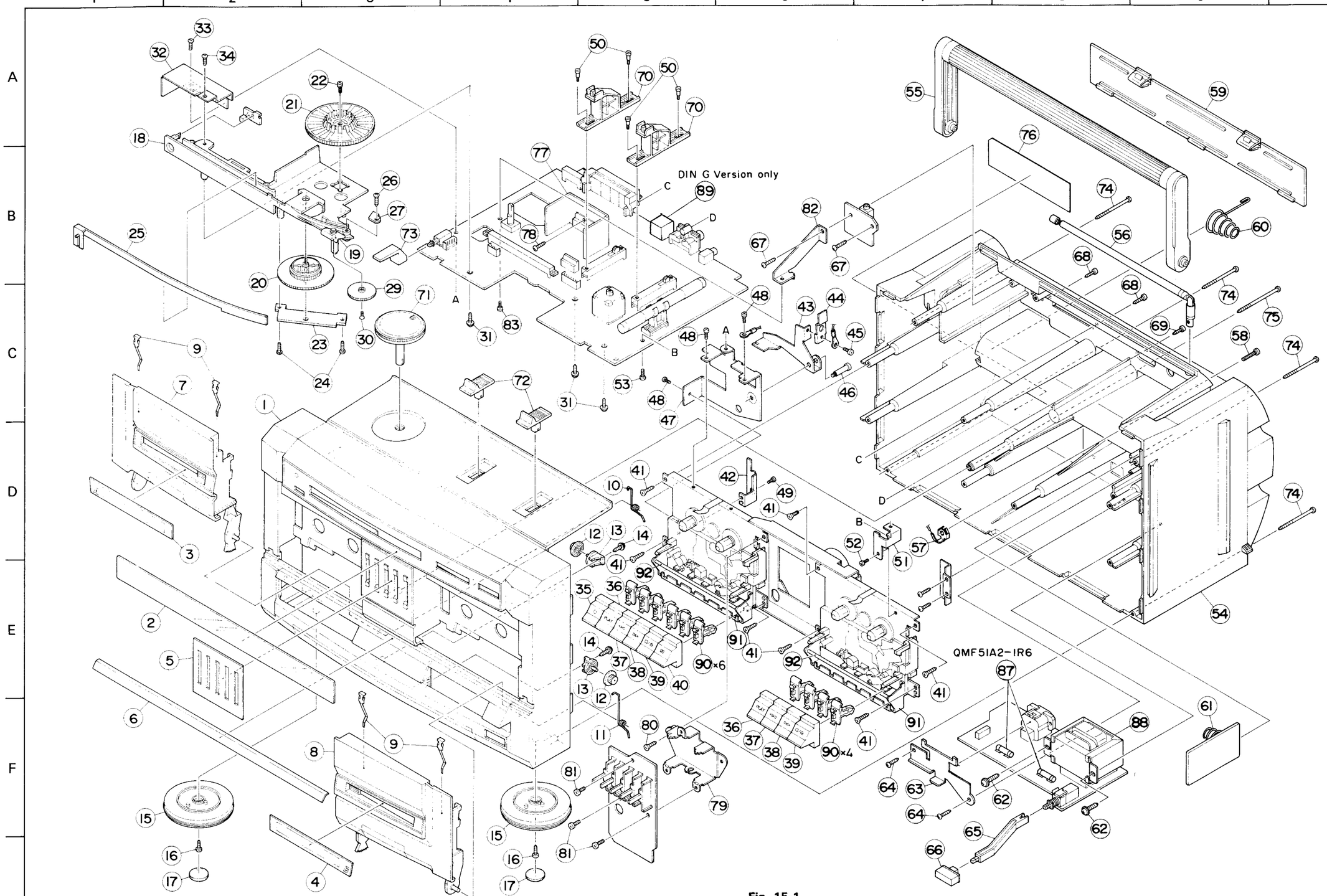


Fig. 15-1

■ Enclosure Component Parts List

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	1,2,5,6	ZCPRW150B-FBK	FRONT CABINET ASS'Y	PC-W150 B	1
	15—17	ZCPRW150E-FBK	〃	PC-W150 E	1
		ZCPRW150G-FBK	〃	PC-W150 G	1
		ZCPRW150GI-FBK	〃	PC-W150 GI	1
	3,7.9	ZCPRW150K-CBKA	CASSETTE DOOR ASS'Y (A)		1
	4,8,9	ZCPRW150K-CBKB	〃 (B)		1
	1	VJC1696-502	FRONT CABINET		1
	2	VJK3437-502	DIAL LENS		1
	3	VJT3298-001	DOOR PLATE		1
	4	VJT3298-002	DOOR PLATE		1
	5	VJD3739-502	SEA PLATE		1
	6	VJD3728-501	CONTROL PLATE		1
	7	VJT2244-001	CASSETTE DOOR	DECK A	1
	8	VJT2244-002	CASSETTE DOOR	DECK B	1
	9	VKY4180-001	CASSETTE SPRING	CASSETTE DOOR	4
	10	VKW4752-003	DOOR SPRING		1
	11	VKW4753-003	DOOR SPRING		1
	12	VYH5601-001	GEAR	FRONT CABINET	2
	13	VYH5602-001	DAMPER HOLDER	FRONT CABINET	2
	14	GBSF3012Z	SCREW	DAMP HOLDER	2
	15	VJF4018-002	FOOT	C.DOOR(R)	2
	16	SBSF3010Z	SCREW	FOR FOOT	2
	17	VJF4003-001	FOOT		2
	18	VYH2214-002	TUNER CHASSIS		1
	19	VYH6784-001	SHEILD		1
	20	VXL4318-001	TUNING KNOB		1
	21	VYH6717-002	TUNING GEAR		1
	22	LPSP2606Z	SCREW	TUNER GEAR	1
	23	VYH6718-001	NEEDLE HOLDER	SEA PWB/F.PANEL	1
	24	SBSF2608Z	SCREW	NEEDLE HOLDER	2
	25	VJN4127-002	NEEDLE	TUNER CHASSIS	1
	26	SBSF3008Z	SCREW	NEEDLE HOLDER	1
	27	VYH6848-001	HOLDER	NEEDLE	1
	29	VXL4187-003	KNOB	FINE TUNING	1
	30	SSSP2004Z	SCREW	FINE TUNING	1
	31	GBSF3010Z	TAPPING SCREW	CHASSIS+BOARD	3
	32	VYH6771-001	SHIELD	TUNING CHASSIS	1
	33	SBSF3008Z	SCREW	SHIELD	1
	34	SDST3006Z	SCREW	SHIELD	1
	35	VXP3224-001	MECHA BUTTON	FOR RECORDING	1
	36	VXP3224-002	MECHA BUTTON	FOR PLAY	1
		VXP3224-002	MECHA BUTTON	FOR PLAY	1
	37	VXP3224-003	MECHA BUTTON	FOR REWIND	1
		VXP3224-003	MECHA BUTTON	FOR REWIND	1
	38	VXP3224-004	MECHA BUTTON	FOR F.FOWARD	1
		VXP3224-004	MECHA BUTTON	FOR F.FOWARD	1
	39	VXP3224-005	MECHA BUTTON	FOR STOP	1
		VXP3224-005	MECHA BUTTON	FOR STOP	1
	40	VXP4695-001	MECHA BUTTON	FOR PAUSE	1
	41	SSSF3012Z	SCREW	MECHA.+REAR	7
	42	VYH6720-001	REC BRACKET	DECK A	1

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY
	43	VYH6721-001	REC LEVER	DECK A	1
	44	VYH6762-002	REC SPRING	DECK A	1
	45	SDST2604Z	SCREW	REC.SPRING	1
	46	VKZ4380-004	SCREW	REC.LEVER	1
	47	VYH6719-001	MECHA.BRACKET		1
	48	SPST2004Z	SCREW	MECHA.BRACKET	3
	49	SDST2004Z	SCREW	REC.BRACKET	1
	50	VYH4017-001	STUD	SLIDER	4
	51	VYH6793-001	BRACKET		1
	52	SDST2004Z	SCREW	REF.NO.51	1
	53	SDST3006Z	SCREW	REF.NO.51	1
	54	VJC1697-008MM	REAR CABINET		1
	55	VJH4099-00A	HANDLE ASS'Y		1
	56	VJA3006-00E	ROD ANTENNA		1
	57	VYH5012-004	TERMINAL LUG		1
	58	SDSP3016R	SCREW	TERMINAL LUG	1
	59	VJC2016-008	BATTERY COVER	RECORD	1
	60	VYH5657-001	BATTERY SPRING		1
	61	VYH5483-001	BATTERY SPRING	CONTACT BOARD	1
	62	GBSF4020Z	SCREW	POWER TRANS	2
	63	VYH7283-001	AC BRACKET	P.SUPPLY BOARD	1
	64	SBSF3010Z	SCREW	AC BRACKET	2
	65	VYH6723-001	REMOTE BAR	POWER SWITCH	1
	66	E303883-003	BUTTON	POWER SWITCH	1
	67	SBSF3010Z	SCREW	H.PHONE BOARD	2
	68	SDSF3008R	SCREW	SPEAKER TERMINAL	2
	69	SDSF3008R	SCREW	REAR CABINET	1
	70	VYH6724-001	SLIDER	BAND,FUNCTION	2
	71	VXL4319-001	VOLUME KNOB		1
	72	VXS4292-001	SLIDE KNOB	BAND,FUNCTION	2
	73	VXP4788-001	PUSH KNOB	TAPE SELECT	1
	74	SBSF3050Z	SCREW	FRONT,REAR	4
	75	SDSF3065Z	SCREW	FRONT,REAR	1
	76	VYN7049-M002	NAME PLATE	PC-W150 E	1
		VYN7049-M003	〃	PC-W150 B	1
		VYN7049-M008	〃	PC-W150 G	1
	77	VYH6755-001	HEAT SHINK		1
	78	SBSF3008Z	SCREW	HEAT SINK	1
	79	VYH6766-001	SEA BRACKET	SEA BOARD	1
	80	SSSP3008Z	SCREW	SEA BRACKET	1
	81	SDST3006Z	SCREW	SEA BOARD	3
	82	VYH6767-001	VOLUME BRACKET		1
	83	SDST3006Z	SCREW	VOLUME BRACKET	1
⚠	87	QMF51A2-1R6	FUSE	F303	2
⚠	88	VTP48P2-12HN	POWER TRANS	T301	1
	89	QMC9014-008	DIN SOCKET	: J370—PC-W150 G ONLY	1
	90	18213107T	OPERATION LEVER		10
	91	18213106T	BUTTON FRAME (S)		2
	92	18293103T	BUTTON LEVER SAFT		2

16 Packing Illustration and Parts List

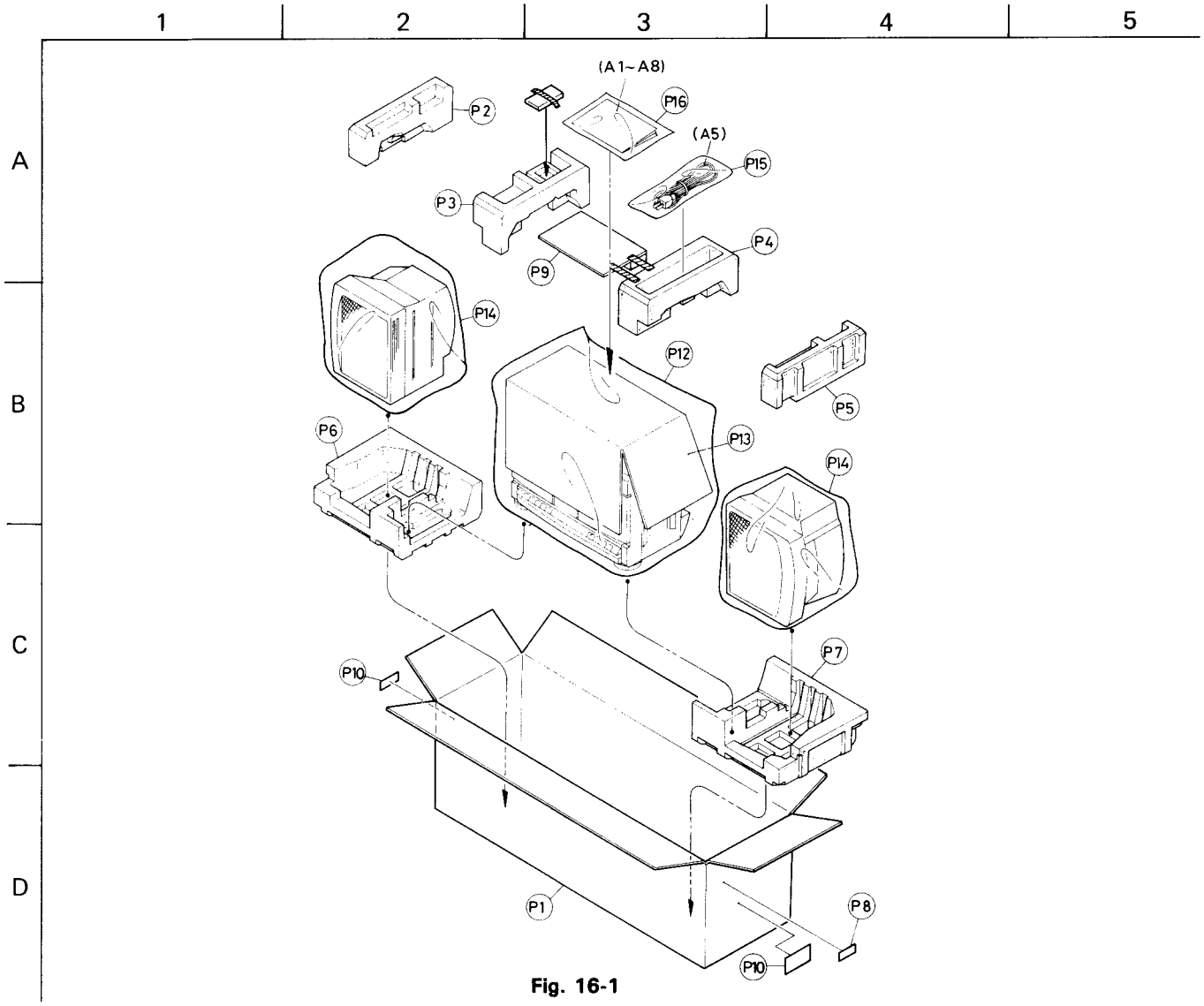


Fig. 16-1

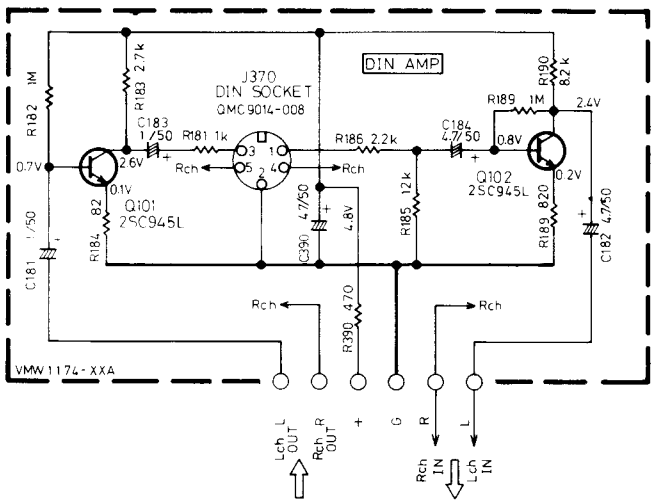
■ Packing Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
P1	VPC7049-M001	Carton		1
P2	VPH2350-001MM	Cushion (Upper)	L Side	1
P3	VPH2351-001MM	Cushion (Upper)	L Side	1
P4	VPH2352-001MM	Cushion (Upper)	R Side	1
P5	VPH2353-001MM	Cushion (Upper)	R Side	1
P6	VPH1428-001	Cushion (Lower)	L Side	1
P7	VPH1429-001	Cushion (Lower)	R Side	1
P8	VND3025-098	Bar Cord Label		2
P9	VPA3467-001	Cushion	Upper Center	1
P10	VND3044-003	Serial Ticket	PC-W150 E: Blue	1
	VND3044-004	〃	PC-W150 B: Green	1
	VND3044-001	〃	PC-W150 GI: White	1
	VND3044-005	〃	PC-W150 G: Red	1
P12	VPE3005-026	Poly Bag	For Receiver	1
P13	VPK4002-016	Sheet	〃	1
P14	VPE3005-018	Poly Bag	for Speaker Box	2
P15	QPGA012-02505	〃	For Power Cord	1
P16	VPE3005-004	〃	For Instruction Book	1

17 Accessories

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
A1	BT20060	Warranty Card	PC-W150 B	1
A2	BT20066A	"	PC-W150 B/G	1
A3	BT20114	"	PC-W150 G	1
A4	VNN7049-211M	Instruction Book	PC-W150 B/E/G	1
	VNN7049-411M	"	PC-W150 E: Belgium, Holland	1
A5	QMP3950-183	Power Cord	PC-W150 E/G	1
	QMP5510-183B5	"	PC-W150 B	1
A6	E43486-340B	Safety Instruction Sheet	PC-W150 B	1
A8	PU36158	FTZ Information Sheet	PC-W150 G	1

■ DIN Circuit Section



NOTE

1 VOLTAGE VALUES ARE MEASURED WITH NO SIGNAL USING E.V.METER.
2 RATING OF RESISTOR ARE 1/6W
3 ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).

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